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**POLICIES AND PRACTICES IN PUBLIC PERSONNEL
ADMINISTRATION**

*Report of the Committee on
Employee Training in the Public Service
of the
Civil Service Assembly of the United States and Canada*

**EMPLOYEE TRAINING
IN THE PUBLIC SERVICE**

Committee on
EMPLOYEE TRAINING IN THE PUBLIC SERVICE
of the
CIVIL SERVICE ASSEMBLY
of the United States and Canada

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EMPLOYEE TRAINING IN THE PUBLIC SERVICE

A Report Submitted to the
CIVIL SERVICE ASSEMBLY

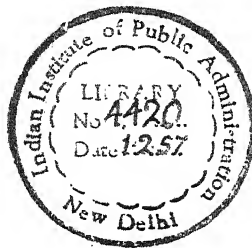
By the Committee on
Employee Training in the Public Service

MILTON HALL, Chairman

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Foreword

THE management of governmental affairs has become increasingly important as the activities of governments have grown in magnitude and broadened in scope, particularly during the last quarter of a century. This has led inevitably to an intensification of interest in problems relating to personnel administration—a function that is an essential and integral part of over-all management. The rapid extension and improvement of merit systems in national, state, and local governments and the renewed interest of many important groups in public personnel problems have marked this development during the last few years. All interested groups, including public personnel workers themselves, have long felt the serious need for a searching review and appraisal of existing personnel policies and practices and the formulation of proposals for the more complete and satisfactory performance of personnel activities. Plans for meeting this need were approved by the Executive Council of the Civil Service Assembly in 1937. The present report is one of a series which, when completed, will bring together for the first time a set of authoritative and forward-looking volumes dealing with the major phases of public personnel administration.

More than sixty outstanding personnel officials, general administrators, technical and research workers, educators, and representatives of civic, professional, and employee groups actively participated in the preliminary planning of this huge undertaking. It was agreed that the final findings and reports resulting from this comprehensive effort would be based upon special field studies of public personnel policies and practices, which would be supplemented by information obtained from existing studies and reports dealing with personnel problems and by the ideas and suggestions of those who were in a position to make helpful contributions because of their training or experience. It was further agreed that the reports should not be the work

of one person, or of a small group of persons, professing omniscience in the field. It was felt that the final reports should be the product of group effort and group thinking, which could be realized through the appointment of a series of committees whose members would give their time, energies, and ideas to make the undertaking successful.

To collect and appraise facts regarding present public personnel policies and practices, a specially recruited staff conducted field studies covering twenty-two different public personnel agencies selected because of their differences in size, location, and problems. In each jurisdiction one or more members of this field staff conducted intensive interviews with personnel administrators, technicians, departmental administrators and supervisors, political leaders, and representatives of organized employee associations. Approximately four hundred persons were interviewed during the course of the field studies. Complete notes were made of these interviews. Information and suggestions obtained in this way were supplemented by a careful study and review of other materials, such as: appropriate legislation; annual and special reports of the personnel agencies; special studies and memoranda regarding the work of the personnel agencies which had been prepared by outside organizations and disinterested persons; personnel tests, forms, records, statistics, and methods; and finally, actual observations of the agencies' operations. On many occasions, significant and helpful documentary material not ordinarily available to a researcher was placed at the disposal of the field staff.

As a result of this work, a detailed case history was prepared for each agency covered by the survey. Each case history included statements of fact regarding the personnel policies and practices of the agency; ideas and suggestions obtained from those interviewed, from reports, and from other sources; a critical appraisal of the policies and practices of the agency as they were actually working; and suggestions for changes and improvements which originated with those interviewed or members of the survey staff. The information and suggestions included in each case history were gathered and organized according to a

prearranged plan that made it possible to classify the material into broad categories corresponding to certain major aspects of public personnel administration.

The case histories and all other available materials were then placed in the hands of a number of committees for use as basic information in the preparation of final reports. Each committee was given the task of preparing a report dealing with a specified functional subject in the field of public personnel administration. In addition to the case histories, the committees were given access to supplementary descriptive and interpretative material regarding many agencies not covered by the field survey; special reports and theses relating to the work of personnel agencies and to technical and administrative problems in personnel administration; selected bibliographies; and other materials brought together by the Assembly's Headquarters Office in connection with its regular activities as a clearing house in the field of public personnel administration. Committee chairmen and members were encouraged to augment this material by consulting with persons and groups who were in a position to make substantial contributions of ideas and facts and by conducting special investigations and researches. Through the occasional issuance of memoranda and special notes, all committee members were kept currently informed of the progress being made and the problems being faced by participants in the undertaking.

Following a procedure approved by the Assembly's Executive Council regarding each committee, one person was appointed by the President of the Assembly to serve as chairman of an advisory committee to prepare an appropriate report on the particular subject or phase of public personnel administration assigned to it. The members of each committee were chosen because of their interest in, and knowledge of, the matter falling within the committee's general jurisdiction, and because of the diverse viewpoints which they could bring to the committee's work. More than three hundred persons have served on the several committees. About one-half of them are persons actively engaged in public personnel administration. The other half are general administrators, educators, industrial personnel workers,

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and leading members or representatives of civic and professional groups, governmental research associations, and employee organizations.

It has been the responsibility of each chairman to initiate and coordinate the activities of his committee. The work methods of the several chairmen have naturally differed. Some have used their committees largely as sounding boards on various problems or proposals referred to them and have asked committee members to review outlines and manuscripts and to offer their comments, criticisms, and suggestions for the purpose of injecting the influence of their composite views and experiences into the final reports. Others have asked individual committee members to assume the task of bringing together all necessary material regarding a particular segment of the committee's assignment and to prepare a corresponding section of the final report. It has been the chairman's responsibility, without obtaining formal action by the committee, to reconcile differences of approach and to mold his own ideas and materials and those submitted by his committee members into a final integrated report. This procedure has made it possible for each report to represent the collective contributions of outstanding thinkers and doers in public personnel administration, and of persons engaged in other fields who have the vision, imagination, and freedom from professional introversion to propound the broad principles and objectives that should determine the role of personnel administration in the over-all scheme of public affairs.

At the very inception of the undertaking, it was stressed that each report should represent a synthesis of the most effective and desirable policies and practices on a particular phase of public personnel administration. It was contemplated that each report would be more than a mere tallying of existing practices and malpractices, and that it would thus be qualitative rather than quantitative. It was also agreed that each report would not only carry the story of the effective steps which had been taken by personnel agencies to reach certain objectives, but would go further and project beyond present policies and practices to more desirable or acceptable ones.

Any statement regarding the undertaking would be incomplete without acknowledgment of the substantial and effective help given by the staff of the Assembly's Headquarters Office. Maxwell A. DeVoe was responsible for the immediate supervision of the special field staff originally engaged in gathering needed information for the undertaking and for coordinating the efforts of the several committees participating in the preparation of final reports. He was ably assisted in his work by Jeremiah Donovan, John Steven, and Doris Haney Jones. Henry F. Hubbard played an important and effective part in the preliminary planning of the undertaking and in its subsequent development. To James M. Mitchell has fallen the difficult task of helping to bring a number of reports through the process of final committee consideration and ultimate publication. Sincerest appreciation is hereby tendered to the many public spirited persons who, without compensation, took an active and helpful part in planning this undertaking and bringing it to its present stage of completion. The Assembly is grateful to the copyright holders who have permitted the quotation of copyrighted materials in the report. Acknowledgment is made for the assistance rendered by Public Administration Service throughout the process of printing and publishing this report. Great help and much useful information has been made available to the Assembly in connection with this effort by the associations of public agencies and public officials located in the same building with the Assembly's Headquarters Office at 1313 East 60th Street, Chicago, as well as by various other organizations throughout the country. The entire undertaking was made possible through the finances generously provided by the Spelman Fund of New York.

The limited amount of time that committee chairmen and members could take away from their regular activities for the purpose of carrying forward the undertaking and unforeseeable difficulties encountered by the different committees have made it impossible for all reports of the series to be finished simultaneously or in schematic order. It has therefore been decided to publish the reports, for the most part, in the order of their completion.

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This report, *Employee Training in the Public Service*, like all others of the series, is a document which a committee has submitted to the Civil Service Assembly. The information and recommendations presented in its pages represent the collective thinking of the chairman and his committee. The report was not prepared with a view toward official approval or formal adoption by the Civil Service Assembly, its Executive Council, or its Headquarters staff, and no action of this nature is contemplated. It is, however, as forward-looking and authoritative as the chairman and his associates have been able to make it.

G. LYLE BELSLEY, *Director*
Civil Service Assembly

Preface

THE preparation of this report has been a joint enterprise of the persons who constituted the Committee appointed by the President of the Civil Service Assembly.

As Chairman of this Committee, I took it as my responsibility to lay down the general framework for the report; to invite several members of the Committee to write selected chapters; to coordinate the efforts of these people in order to attain consistency throughout the document; to obtain the advice, criticisms, and additional contributions of all members of the Committee; to reconcile conflicting viewpoints or, failing that, to decide the issue to the best of my ability—in short, to see that the job was done.

In order to establish the general approach of the report, I wrote the first three chapters. The authors of the remaining chapters are:

Chapter IV. DAVID T. STANLEY

Chapter V. Training Staff, Tennessee Valley Authority:
GEORGE F. GANT, Chief; CATHERINE CONGDON,
MARY U. ROTHROCK, LEE S. GREENE, E. F.
HARTFORD, W. J. MCGLOTHLIN, R. O. NIE-
HOFF, and E. M. REED

Chapter VI. LYMAN S. MOORE

Chapter VII. WINSTON B. STEPHENS

To these able collaborators I express my special thanks. To them goes full credit, although I willingly share responsibility.

A preliminary draft of the report in mimeographed form was submitted to all members of the Committee for their criticisms and suggestions. The valuable contributions received are too numerous to be listed here. It may be sufficient to say that the manuscript was measurably improved by the Committee's advice and criticism.

Although the Committee's contribution was great, individual members must not be held responsible for this document. Members may find in the completed report statements with which they are not in full agreement. The Committee served essentially as critic and advisor to the authors and to the Chairman. In some instances the advice received from one member was in complete conflict with that from another; in some instances we have not felt able to accept suggestions that were made. Such instances, however, were not frequent, and the other authors join me in thanking the Committee membership for their invaluable guidance and help.

MILTON HALL

Farm Credit Administration
Washington, D. C.
March, 1941

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**EMPLOYEE TRAINING
IN THE PUBLIC SERVICE**

Chapter I

Introduction

WHETHER or not it has been recognized as such, the training of employees has occurred in every agency. Wherever employees have learned to do their work more effectively and to carry greater responsibility than when they were appointed, training of some kind has taken place. Until recent years, however, only exceptional agencies have given systematic attention to teaching their employees how to perform their duties most effectively and to developing from among employees replacements for those who are promoted or leave the service. Because training so frequently has occurred haphazardly, it has been inefficient and wasteful.

During recent years a new and important movement to place training on a sounder basis has gotten under way in the public service. This movement affects the whole range of public employment policies. Among other things it is now recognized that employee training must be made more effective; that haphazard methods are costly; and that planned training will yield superior results at less cost. Many progressive operating officials are now providing valuable training. Central personnel agencies are awakening to the part they can play in this major phase of personnel administration. More than ever before educational institutions are offering "in-service training courses" to government employees. Employee groups and individual employees are seeking and even demanding that they be given adequate training. This growing interest is evidenced by the authorization of public service training contained in the George-Deen Act, by the number of bills on the subject in state legislatures, by the contribution being made by many state leagues of municipalities, and by President Roosevelt's Executive Order emphasizing the training responsibilities of federal administrative

officials, departmental personnel directors, and the United States Civil Service Commission.

It is at this relatively early stage in the movement toward systematic training in the public service that this report is written. Rapid strides are being made, yet there is much still to be learned about the techniques and administration of employee training. Drawing from experience thus far available, from relevant experience with training in private business, from the fields of education and psychology, and from the emerging science of management, *this report attempts to present sound principles and methods for the practical guidance of those concerned with the training of employees.*

THE MEANING OF EMPLOYEE TRAINING

For purposes of this report, employee training is defined as *the process of aiding employees to gain effectiveness in their present or future work through the development of appropriate habits of thought and action, skills, knowledge, and attitudes.*¹ In this definition "employee" means everyone, on every level, who is employed in the work of an organization.

Excluded by this definition are all formal education, vocational training, and experience which employees gain prior to their appointment. This important field is beyond the scope of our report, which deals with the training of persons *after* they become employed in the public service.

Emphasized by this definition is the idea that, to be called training, an activity must be designed to increase the effectiveness of employees in the work of an organization. Training, then, is no "welfare" activity vaguely designed to make employees happy. Much education, no matter how valuable and enriching it may be to the individual, must be excluded by our definition. Training aims to increase the effectiveness with which the functions of an organization are carried out through

¹In this report the term "employee training," or simply "training," is used to indicate activities coming within the scope of this definition. Since the report deals only with training which occurs after employment, it is not believed necessary to reiterate that fact by the use of such terms as "post-entry training" and "in-service training."

increasing the effectiveness of the personnel comprising that organization.

The definition states also that management actively *aids* employees to gain effectiveness, for the type of training that simply happens cannot be dealt with in a report of this kind. This report is concerned with intentional training, with deliberate planning of experience that teaches, with developing methods to assure that the training which takes place is fully worth while and effective.

The word "aiding," however, was carefully chosen because it correctly implies that training is a two-way process. Although planned efforts to develop "appropriate habits of thought and action" are required, it should not be forgotten that *only the learner can do the learning*. Training is not something that can be merely administered to or injected into employees; it requires their interested response and active participation.

Training may take place in groups or individually, in the classroom or on the job, in the conference room or at a supervisor's desk. Although training is so frequently associated with classrooms and blackboards, and although such equipment of course has its place, it should be emphasized that much valuable training takes place in the office or shop where the work is done.

The greater part of training is ordinarily concerned with direct job instruction. Through such instruction new employees acquire whatever additional skills and knowledge they need to do their new work successfully; experienced employees keep up with changed methods and procedures, learn ways of doing their present jobs with increased effectiveness, or become prepared to fill jobs of greater difficulty and responsibility.

Yet there are other types of activity which also are training. For example, when a unit chief stimulates his people to produce ideas, that is training. When something is done which causes a group of long-service employees to develop an attitude of greater willingness to accept new and improved methods, training has taken place. When an employee is made to realize the vital public service that his agency is performing and thus gains satisfac-

tion and an added "will to work," there has been training. When the provision of means of freer interchange of information between persons in various parts of an organization brings about increased cooperation and coordination, that is training. And training which will multiply itself many times over has taken place when a supervisor is influenced to change from an attitude of ordering or commanding to an attitude of guiding and developing his subordinates' capacities.

MANAGEMENT AND TRAINING

Throughout this report training is recognized to be a function of management. Those who are responsible for the successful accomplishment of the work of an agency are naturally also responsible for maintaining the effectiveness of the personnel who do that work. They are responsible for the development of any competence needed for the successful accomplishment of the agency's functions. As a statement prepared by the United States Department of Agriculture points out, "expecting an employee to perform before he has been taught how to perform is a common source of inefficiency and is the fault not of the employee but of administrative officers above him." (See Reference No. 1 p. 1)²

Some authorities in the field of management go so far as to maintain that training is the most important function of those in managerial and supervisory positions. Although this may be an overstatement of the case, it is true that in some organizations the success of administrators and executives is measured largely by their success in developing subordinates to do the organization's work effectively.

Training is a function of management, but this does not mean that management must necessarily take full responsibility for all activities that come within the definition of employee training. Management's first responsibility is to carry out the functions of an agency as effectively as it can, and it should provide whatever

² A numbered list of reference sources appears on pages 169-72. Citations to these references will be made at various points throughout the text. These will give the number of the reference and in most cases the pages of the reference to which citation is made.

training is needed to reach this objective. It may provide more training than this—training that is desirable but not essential to successful operations, training that is of primary benefit to the individual employee rather than to the agency. How far any agency may go in providing training must be made a matter of public and administrative policy, and this may appropriately depend on conditions which will vary from jurisdiction to jurisdiction.

In any event, in addition to providing directly training that is essential from the agency's point of view, management may well aid employees to provide themselves with instruction that will be of primary benefit to them rather than to the agency, and may also cooperate with educational institutions which serve employees. In the latter instances, the success of the training is less the responsibility of management than of the employee.

The emphasis placed in this report on training as a function of management should not give the impression that training is the concern only of management. In a field that so vitally affects their interests, employees themselves should have a voice in the formulation of policies and practices. Democratic participation in the training process is practicable and necessary. At the same time it must be realized that employees are paid not only to do their work at satisfactory levels of performance, but also to take part in any training they may need to reach these levels.

ORGANIZATION FOR TRAINING

How may management effectuate its responsibilities for training employees? To answer this question in detail is the purpose of the following chapters which make up this report. To provide an orientation to these chapters, however, it is necessary first to consider briefly the general form which the organization for training may take.

This report proceeds from the premise that every person who is in charge of the work of others, from the chief executive to the first-line supervisor, has responsibilities for training. It is his job to be sure that his subordinates receive any training they may need to carry on their duties in an efficient manner. As Lawrence

Appley has said, it is part of the supervisor's or executive's job "to develop the people under him, to build them, to improve their performance by improving their attitudes, their skills, their habits, and their knowledge." (See Reference No. 3, p. 29.)

Top officials have another type of responsibility that goes beyond this. It is their job to determine major training policy, to be sure that needed training is provided and that unjustified training activities are not indulged in, to provide coordination throughout the agency or jurisdiction, and to appraise the results of training.

Experience indicates the desirability of centralizing this type of responsibility. The chief executive, while retaining final responsibility, may delegate the work to another person. In a small organization this person will quite possibly have other duties as well; in an extensive organization with intricate training problems he may be the training officer at the head of a "central training unit." The large jurisdiction's training officers may be found at various levels of the administrative hierarchy. They may be attached to the central personnel agency or unit existing at any of those levels, although in many cases they are not so attached. (The question of the placement of training functions in the central personnel agency is dealt with in Chapter VII.)

The central training officer ordinarily has two major types of functions. In fulfilling the first type of function, the training officer acts as an advisor, energizer, planner, and coordinator. He sees what training needs to be done and assists operating units to do it. He develops on the part of officials an appreciation of the necessity for organized training, helps them to plan the training program, stimulates them to keep it moving, and may participate in the evaluation of its results. To the knowledge of subject matter possessed by operating executives he adds his own specialized knowledge of training methods and techniques to form an alliance needed for successful training. He aims to develop competence in training among the entire supervisory force. He assists top management in the determination of training policy, and assures top management that needed training is being provided and that the training program of the entire

agency or jurisdiction is being carried on in a planned, coordinated, and efficient manner.

In his second type of function, the training officer directly administers that training which is not better conducted by the regular operating units, and acts as the point of contact with other agencies with whose cooperation joint programs of training may be conducted. Some types of training needs, such as those which cut across organization lines, may be met most efficiently by a central person or unit, provided that this centralized training is carefully integrated with the training responsibilities retained by operating executives. The proportion of the total training job which may successfully be conducted centrally varies with the characteristics of different agencies. Experience indicates, however, that it is impracticable and undesirable for a central training officer or unit to attempt to do the whole job.

STRUCTURE OF THIS REPORT

A brief explanation of the structure of this report may be of assistance to the reader. The following chapter deals with the problem of finding out the employees or groups of employees that need training and of determining for what ends this training is needed. Chapter III is concerned with where and by whom the training is to be given and with related problems of organization. Chapter IV is devoted to the question of selecting and preparing subject matter; it deals with finding specifically and in detail the things that are to be taught. In Chapter V methods of training or the "how" of training are discussed. Chapter VI deals with the evaluation of training that has been given. Finally, Chapter VII examines the subject from the viewpoint of the central training unit; this chapter serves as a summary of the operations discussed in the preceding chapters and, in addition, describes advisory and service functions of central training units.

THE NEED FOR BREADTH

In the field of organized training today there is need for breadth of view and open-mindedness. Viewpoints are frequently

divergent and often narrow. For example, there are those who, ignorant of the fate of the so-called corporation schools in private business, look upon training as essentially a matter of centralized schools and classrooms. Then there are others who, having swung too far in the opposite direction, insist that the only practical training is that which occurs on the job during the course of work. There are some, apparently suspicious of private enterprise, who close their minds to valuable lessons to be learned from experience in that field. Some believe that the central personnel agency should have the same kind of control over training that it has over such matters as selection and classification, and others believe that the personnel agency should keep its hands off entirely.

The field of employee training is so large and its problems are so intricate that narrowness is a luxury that cannot be afforded. The best from all schools of thought must be used if the effectiveness with which the work of government is done is to be increased through training.

Chapter II

Ascertaining the Need for Training

IT is difficult to conceive of any agency in which there is no need whatsoever for training employees. In most agencies the needs are numerous and varied. Although sometimes the need is clearly apparent, frequently it must be discovered and demonstrated. This chapter is devoted to the problem of discovering the particular training that should be carried forward.

Unless careful analyses are made to find out the training that is really needed, there is grave risk of leaving essential training undone while relatively inconsequential activity is engaged in. It must be recognized that training is not an end in itself. Every proposal can be examined profitably in the light of such questions as: Will this training contribute significantly to effective and economical operation? Could our energies be spent more usefully in giving training in some other form or to attain some other objective? A satisfactory analysis of needs reveals the employees or groups of employees for whom training is required, and it provides a sound basis on which to set the objectives of this training.

Persons in administrative and supervisory positions should be on the alert to discover the needs of their employees for training. To supplement these efforts an increasing number of jurisdictions have designated training officers who are outside the regular lines of administrative authority and who have among their functions responsibility for assisting units of the jurisdiction to discover their training needs, for centralizing information about these needs, and for ascertaining what needs are common to more than one unit.

In some instances it has been found desirable to make a rather complete survey to ascertain needs before embarking on an or-

ganized program of training. Such a survey indicates appropriate starting places and provides a valuable blueprint for the step-by-step development of the program as a whole. In other situations, particularly where the idea of organized training has not been completely accepted, it may be necessary to proceed more slowly. In any event it should be emphasized that the analysis of needs is not something that can be done once and for all but rather that supervisors and the training officer, if there is one, should be alert continuously to discover the training needs of employees.

A CLASSIFICATION OF NEEDS

The task of analyzing the need for training is often simplified and systematized by breaking it into a number of parts. Steps may be taken, first, to find out what training is needed to enable new employees to function effectively in their jobs. Then, attention may be turned to personnel already employed in order to ascertain the training that is needed (1) to maintain or increase employees' effectiveness in their present positions, (2) to prepare employees for promotion, (3) to retrain employees so that they may be more versatile or so that their experience may be salvaged when their present occupations disappear, or (4) to develop coordination, morale, and other elements of general "organization fitness." The discovery of needs is facilitated when these broad purposes or objectives of training are kept in mind.

Training for New Employees¹

The fallacy of attempting to fill all vacant positions with persons who are completely "ready trained and ready to work" has become increasingly clear. In the first place, where a career system prevails² it is necessary in selecting employees to give at least as much attention to their capacity for development as to their

¹Since training is one of the functions of the probationary period, reference should be made to the report of the Committee on the Probationary Period, a companion report in this series.

²For a discussion on recruiting for careers, it is suggested that the reader consult the report of the Committee on Positive Recruitment, a companion report in this series.

possession of narrow and specific skills needed for the immediate job. Moreover, even when the appropriate aim of the examining process is to select persons who have all the knowledge and skill needed for their immediate positions, the fact remains that frequently it is not possible to achieve this aim completely. Under these circumstances training is needed to supplement the selection process in order to build an effective working force.

The extent to which this supplementary training must be given varies considerably. In some instances, particularly where the work to be done is specialized and peculiar to the agency, a great deal of training may be needed. At the other extreme it will be found that many incoming employees need little instruction, either because their prior training neatly fits the requirements of the position or because the work is too simple to call for significant preparation.

It must not be assumed, however, that careful training is unnecessary merely because the amount to be learned is limited. Experience has shown that in many cases the investment of a few hours of time in making sure that the new employee has a clear understanding of his duties and of how he is to perform them is sufficient to bring large returns through reduction of costly errors or accidents and reduction in time required to achieve a satisfactory level of performance. Common failure to recognize this fact undoubtedly costs the public service heavily in terms of efficiency and of citizens' respect.

In addition to learning the specific jobs which they are to perform it is necessary for all new employees to learn certain information about the organization as a whole. They must be informed, for example, about the rules and regulations governing their employment, about hours of work, provisions for sick leave and vacations, regulations regarding political activity, causes for termination, and all the other personnel policies and practices which so intimately affect them. Many agencies, moreover, are finding it worth while to provide new employees with an understanding of the aims and purposes and the social usefulness of the agency as a whole, of the functions and location of its various parts, and of how their own jobs fit into the total picture. Al-

though this "orientation training" is sometimes limited to higher level employees, experience generally indicates that it may profitably be extended to employees on all levels even if this training is provided merely through interviews and an "employees' handbook."³

Although the training provided by the educational system for young persons before they take employment (often referred to as pre-entry training) is beyond the scope of this report, the relationship between this training and training after employment may appropriately be considered briefly. There need be no conflict between these two forms of training because each has its place. Employee training aims to supplement and to make up for the limitations of pre-entry training. Three major reasons why the schools and colleges cannot do the whole job have been stated succinctly by Lyman S. Moore:

(1) Their insufficient experience in public service training. Many universities have not yet determined whether their function is to give students equipment for special public posts or to provide them with a general background in public administration. (2) They cannot be expected to establish training courses for specific types of public officials unless their graduates have a reasonable chance of being placed. There must be a continuous, predictable demand, for example, that a public works official be a person of special competence and training before universities can be expected to undertake special preparation for this field. (3) The functions of government are becoming so specialized and the requirements of the public service are changing so rapidly that no amount of pre-entry training will completely prepare a prospective public employee to perform capably his duties on the job. (See Reference No. 28, p. 33.)

Operating units of government, on the other hand, are not in a position to provide broad fundamental training of the kind that can be given best by a professional school. Operating agencies generally aim to find persons who, as far as possible, have been soundly trained, and then add to this training the knowledge and skills required for successful performance in the agency.

³The report of a committee which has studied the problems of preparing and using orientation handbooks is being prepared under the sponsorship of the Training Division of the United States Civil Service Commission.

Training for Present Employees

The need for training does not stop when new employees have been trained for their immediate assignments. Indeed, in probably the majority of jurisdictions the burden of training is likely to be concerned with present employees. Employed personnel may need further training for a variety of purposes which may include the following:

To increase effectiveness in present position. It has been demonstrated many times that the mere fact that an employee has been doing a certain kind of work for a long period of time is not proof that he is doing the work as well and as safely as he could. Failure to reach high standards of performance may result from a number of causes which cannot be corrected by training; frequently, however, the prescription calls for systematic development of additional knowledge and skill.

Mediocre performance may mean that the employee never was taught how to do his job better. Quite possibly at the time of appointment he had been assigned to his duties after receiving only the sketchiest of instructions. He "picked up" the work by trial and error or through the help of fellow workers who had had no more instruction in correct methods than he—with the result that he learned a sufficient number of wrong ways of doing the job to prevent him from achieving a high level of performance. This kind of situation often explains why carefully trained new employees not uncommonly do better work than their more experienced fellows—and it lends emphasis to the need for training employees who may have been on the job for many years.

Training is sometimes needed to compensate for weaknesses in earlier methods of selection. In cases of this kind, for example, employees may have been appointed without benefit of merit examinations and later have been "blanketed in." As a result many of these employees may lack some qualifications that under a stringent examination procedure would be required for appointment. Under circumstances like this it is frequently worth while for the agency as far as possible to provide training

which these persons should have had before appointment, for often they have gained experience which makes them too valuable to be terminated.

From the foregoing discussion it should not be inferred that training is applicable only to employees whose work is below par. On the contrary some agencies prefer to concentrate training efforts on the more promising employees. In any event it is common experience that in many situations employees whose work is quite satisfactory reach even higher levels of efficiency on their present jobs after appropriate training.

The discussion thus far has been concerned with situations in which job requirements remain static, but these situations are becoming increasingly uncommon in this age in which it is necessary to keep moving forward to avoid slipping backward. A great deal of training needs to be done to enable employees to keep up with changed laws, policies, and procedures, with improved methods, and with the development of knowledge in their professional or technical fields.

To prepare for promotion. As the public service in America moves toward the ideal of the merit system and a career service, training for promotion takes on increased importance. As long as the personnel of an agency turns over with changes in political power or as long as tenure or advancement is dependent on factors other than merit, training employees for promotion is likely to be a waste of time and money. Training for promotion becomes of paramount importance, however, when it is the policy to offer employees a career in the public service. The success of a career service depends on training because if higher positions are to be filled successfully through promotion, employees must be enabled to develop the skills and knowledge needed to carry increased responsibility.

Regardless of promotion policy, the need for training employees for promotion becomes acute when the work is specialized, peculiar to an agency, and requires long experience to master. In cases of this kind the agency has no alternative other than to develop within its own staff the experts it cannot recruit from outside.

Careful study of needs is particularly necessary in the case of training for promotion, for two reasons. First, future operations will be handicapped by a lack of qualified replacements unless appropriate training is provided. Second, morale and efficiency will suffer if too many employees are trained for higher positions to which it is impossible to promote them.

To retrain present employees. A less common but still important need is that for retraining to enable employees to gain versatility or to adjust to different occupations.

Frequently it is desirable to retrain employees to perform one or more types of work in addition to that for which they are regularly employed, and in this way to provide a reservoir that can be drawn upon during emergencies or peak loads. Organizations which follow this practice find that it does much to assure flexibility and continuity of operations. Training for this purpose, of course, is an advantage from the employees' point of view in that those who can fill more than one position are likely to be retained when it becomes necessary to abolish positions as a result of reorganization.

A closely related need that sometimes arises is that of retraining employees when the type of work for which they are equipped is discontinued because of technological changes or changes in the functions performed by an agency. The New York City Sanitation Department, for example, found it necessary to retrain many employees as a result of the mechanization of the Department's functions. Although it is not always feasible to do so, the retraining of employees helps to maintain the morale of the entire personnel and enables the agency to retain much valuable experience and knowledge that would be lost if the employees were terminated and replaced.

To develop organization fitness. The need for training does not stop with instruction for specific positions, for frequently there is need for giving systematic attention to developing what may be called *organization fitness*.

It is in this broader and frequently neglected field that some of the most valuable results of training may be obtained. The performance of persons in varied types of work can be made to

contribute more directly to the objectives and purposes of the organization by developing an understanding and appreciation of these objectives. Enthusiasm, that energizing but often absent quality, can be aroused by developing an appreciation of the significance and usefulness of the services provided by the agency. Conflict and lack of cooperation between groups can be reduced by giving each a better understanding of the functions and responsibilities of the others. Coordination similarly may be improved by providing for a flow of information to appropriate points. Employees on all levels may successfully be taught to find ways of simplifying and improving their work methods. Breadth of view, open-mindedness, readiness to learn, and abhorrence of inefficiency are habits of thought which can be learned. Employees who come into contact with the public either in person or through the letters they write can be taught to build good will. Finally, specific steps can be taken to develop morale or *esprit de corps*, for morale is an attitude, and an attitude is a habit of thought, and habits are susceptible to training.⁴

Self-analysis by agencies to ascertain whether there is need for training to bring about improvement in the various phases of organization fitness is clearly as important and necessary as is analysis to ascertain needs for instruction in specific job skills.

GUIDES TO ASCERTAINING NEEDS

To accomplish the objectives of any agency, certain skills, knowledge, and attitudes must be possessed by the personnel of the agency. To ascertain the need for training it is necessary (1) to know what these requirements are, and (2) to find the extent to which present or prospective employees meet them. It is in this area of the difference between (1) and (2) that the employees or groups of employees who need to be trained are discovered and an indication of the nature of the required training is obtained. Currently used methods of ascertaining needs will be described here, first, as they apply to individual operating

⁴The creation of morale by training and by other means is dealt with particularly well by Ordway Tead in Chapter 13 of his *Human Nature and Management*.

supervisors; and, second, from the standpoint of the training specialist.

Analysis by Employees' Immediate Chief

An increasing number of organizations are requiring persons in supervisory positions to analyze the training needs of their immediate subordinates. In these organizations supervisors are given an understanding of the major purposes of training and are urged to review their employees systematically, asking of themselves such questions as: What, precisely, will this new man need to learn? How can each of my employees become more effective in his present work? What would the understudies in my unit need to learn, what abilities and skills would they need to develop, before they could be promoted? Questions like these are answered by comparing the man with the requirements of his present position or of the position for which he is being prepared.

The Socony-Vacuum Oil Company, whose approach to training has been adopted by a number of public service agencies including the United States Civil Service Commission, provides all executives and supervisors with a formula to be used in training their subordinates. The steps of this formula that apply to the ascertaining of needs have been described by L. A. Appley,⁵ training director of the company, as follows:

(1) Step number one of the procedure is a job analysis, a statement prepared by the boss with the employee in a private interview, or in group conference if several employees are doing the same job—a list of responsibilities, clearly stated, and the authority that goes with those responsibilities, so that it is understood what the boss expects.

The technique we suggest is that the boss take at least half a day with each individual (or group) who reports directly to him and discuss with him his job, arriving at the job analysis.

This written statement, in this particular connection and made up in this way, serves several purposes. The first purpose is to enable the individual to look at his own job to see if he is performing it as he should. Secondly, it furnishes a basis of common

⁵From a statement made by Mr. Appley at the 1937 Conference of District Personnel Officers of the Farm Credit Administration.

understanding between man and boss. It is something they can talk about. Thirdly, it is a basis for the development work that is to follow.

(2) If we wish to change men, we want to change them toward a certain objective. So step number two is a statement of standards of performance. When is the job well done?

Let us base our judgments on the performance in all functions of the job and not on just one or two. Let us have a common basis of judgment, so that boss and man at regularly assigned intervals may take each item of the job and arrive at a fair analysis of how well it has been done.

(3) When you have standards of performance, the next step is to compare them with present performance. After the boss has analyzed the actual performance with the standard of performance and located the weaknesses, he discusses them with the man and suggests what can be done about them.

A list of the helps and information necessary to bring performance up to standard is made up. Technical information, information of a general nature, special information in connection with a particular function, or subjects of a broad educational nature, may be needed.

Whether or not these exact steps are followed, it is becoming generally recognized that the individual supervisor has responsibilities for analyzing the needs of his subordinates for training.

Agency-wide Needs

Although it is important that every supervisor and official be alert to the training needs of his immediate subordinates, many organizations have found it desirable to go further. These agencies take steps to discover the needs of the organization as a whole. When this is done it is possible, for example, to discover needs that are common to employees in various parts of the organization and that, therefore, may perhaps be cared for best by centralized instruction. Whether this analysis is performed by a regularly designated training officer or by some other official, his job is made more difficult by the fact that he does not have first-hand supervisory contact with the employees of each unit of the agency.

*Position classification.*⁶ A formal system in which positions are

⁶ Position classification is discussed in detail in the report of the Committee on Classification and Pay Plans, a companion report in this series.

classified according to duties and responsibilities, with each class of position described or defined and with a statement of the qualifications required for performance of its duties is, for two major reasons, a valuable and sometimes essential aid in analyzing training needs.

The first reason why position classification is so valuable is that it provides a common language. When, for example, several unit chiefs report that additional training is needed for "accounting clerks," it is known that all the chiefs refer to people who do the same or closely similar work. Without standard terminology the task of analyzing needs is seriously handicapped. Some means of grouping employees for training purposes is necessary even though a full-fledged position classification plan may not be essential.

The second major value of a sound classification plan is that it supplies in summary form a convenient description (1) of the work carried on by employees throughout the agency and (2) of the qualifications presumably required to perform this work. And it gives these specifications in terms of classes of positions rather than of individual positions, thus reducing to a manageable number the elements to be dealt with. A classification plan that is kept current supplies, therefore, in preliminary form at least, a requisite for ascertaining training needs; namely, information about duties and job requirements.

It has been found useful not only to examine individual class specifications but also to group the specifications according to work elements which they have in common. In this way it is possible to find which classes of positions (and which employees) may require, for example, a knowledge of accounting principles or the ability to interpret statistical data.

Yet appreciation of the values of a position classification plan should not lead anyone to maintain—as some have—that position classification in the formal sense of the term is absolutely essential to successful training. Much training has been conducted successfully in agencies where no formal classification plan exists. Moreover, the usual specifications, while extremely useful in a preliminary isolation of needs, frequently are not suffi-

ciently detailed for further use: As Chapter IV will explain, when subject matter is to be developed it is often necessary to make job or activity analyses which are more penetrating and complete than are those required for position classification purposes.

While the usefulness of statements of duties is being considered, it is appropriate to point out that statements of the objectives or functions of organizational units comprising the agency and of the agency as a whole are similarly useful in suggesting the general nature of training that may be desirable. An analyst or investigator approaching the study of training needs among any group of employees may supplement position specifications with a broader study of organization problems. For example, he may inquire as to the points of contact and cooperation among supervisors as well as individual workers, the flow of work, channels of authority and instruction, and the content of bulletins, orders, and regulations. These are a few of the matters regarding the framework and functioning of an organization which may require thorough study to bring important training needs to light.

Measurement of performance. Rule-of-thumb methods of ascertaining how well employees are doing their work may be all that are required in a small unit where the chief knows employees intimately and is fully aware of the weaknesses and strong points of each. More exacting and systematic methods, however, are needed in larger organizations where higher management wishes to know not only what every employee is doing but how well he is doing it. Such measures are developed ordinarily for some purpose other than the one in which we are immediately interested, but they can be of considerable use to anyone who is responsible for discovering deficiencies that may be corrected by training.

Service ratings need not be discussed at length here since they are the subject of a companion report.⁷ Obviously, if an agency's ratings have any validity they serve to indicate employees whose performance is deficient and who may need addi-

⁷See the report of the Committee on Service Rating Plans in this series.

tional training. Training officers in New York City, as well as elsewhere, report that ratings have proved very useful in the isolation of training needs.

Ratings that appear to be particularly useful are those of an analytical type that break the position into its component parts and call for a rating of performance on each. An example of this approach is the method used by one agency in rating its secretaries. The form contains approximately 35 items, such as:

Are her speed and understanding sufficient to prevent excessive interrupting of the dictator?

Are transcripts correct in all matters of English usage, and are minor errors corrected?

Is her voice pleasant and clear?

Is material classified and filed so *anyone* can find it?

Is prescribed office procedure always followed and are correct forms always used?

How thoroughly does she understand the work of the organization and that of her division, section, and office?

This method, therefore, not only reveals that an employee is judged to be deficient but it also localizes specific deficiencies and helps to fit training precisely to employees' needs.

Further significant clues to the need for training are provided by records of errors, accidents, discipline cases, and complaints. Many discipline cases have their foundation in faulty attitudes, ignorance of regulations, or incompetence which might be overcome by appropriate training. Complaints from the public about inefficiency or discourtesy provide a particularly strong stimulus to adequate training.

Observation of the performance of organization units is useful, particularly when individual performance reports are not available. Failure of the units to reach full efficiency in carrying out their functions is often clearly apparent or it may be revealed through regular surveys by procedural or planning specialists. While such failure may be due to many causes other than those which training can correct, it calls for investigation to ascertain whether the employees of the unit have sufficient knowledge and skill to perform their jobs satisfactorily.

Recommendations of officials and supervisors. Officials and supervisors quite naturally are an important source of information regarding the training that is needed by an agency, for it is they who are in constant daily contact with employees and should know their shortcomings, and it is they who know about changes in operations, procedures, or work requirements that may call for training. Information may be obtained by means of informal contacts, survey interviews, conferences, committees, questionnaires, or check lists, but the important requirement is that anyone who is responsible for bringing to light the training needs of an agency as a whole must keep in constant contact with its officials.

Officials and supervisors, of course, are a particularly valuable source of information in organizations where they are specifically charged with responsibility for ascertaining the training needs of their own subordinates. (See page 17, "Analysis by Employees' Immediate Chief.") In such organizations there remains only the problem of providing means by which the information possessed by supervisors may be pooled. In one organization the question of needs is periodically discussed at regular divisional staff conferences and the supervisors of each division indicate the types of training that are needed to supplement their own efforts. The same organization, like a number of others, has an "employee training committee" composed of a ranking official from each of the divisions comprising the agency; and one function of this committee is to pool knowledge about needs for training.

Recommendations of employees. In many cases, of course, employees themselves have a clear idea of the training they need. Although this information may be transmitted through their supervisors, some agencies have found it advisable for the training officer or other person charged with responsibility for centralizing information to obtain it directly from employees.

Because of the larger number of people usually involved, the gathering of sound information is made difficult; yet efforts often would be worth while even if they did little more than give employees a sense of participation. If there is a union or

other organization of employees, it may serve as a vehicle for information about needs; for example, a union local in the Social Security Board at one time presented an excellent series of recommendations. Some agencies let it be known that suggestions are always welcome; a number submit questionnaires or check lists to employees.

A particularly well-prepared check list has met with considerable success in ascertaining the training needs of public social service workers in Michigan and elsewhere. After calling for a statement of duties, the form lists approximately 80 skills or fields of knowledge, such as: statistical methods, preparation of case records, housing standards, filing methods, and laws and administrative regulations regarding old age insurance. The employee is asked to indicate, by checking in one of three columns, the extent to which each of these skills or fields of knowledge is needed in his position: (1) Essential for satisfactory performance on job, (2) Desirable for satisfactory performance on job, or (3) Desirable for referral purposes or limited background knowledge. Use of this check list led to the significant conclusion that "Subordinate employees often had far clearer conceptions of the skills and knowledges needed on their jobs than did their superior officers."⁸

Nevertheless, the gathering of information from employees has certain limitations and it cannot validly provide the sole basis for deciding what training is to be given. Employees are not in a position to know about administrative developments which may make training necessary, nor are they always able to evaluate accurately their own shortcomings. Moreover, some employees are likely to desire training for promotion to positions for which they may lack the necessary native ability or for which there already may be a surplus of trained persons.

Recommendations of selection and placement authorities. Selection and placement authorities are another important source of information. Through the examining and selection process, they are in a position to know how completely incoming

⁸From a letter by George C. S. Benson, Director, Curriculum in Public Administration, University of Michigan.

employees in each class of position are prepared to carry on their duties and to what extent their prior training must be supplemented. Selection officers are in a position to appraise the market and to indicate, perhaps, that skilled workers of a certain kind are not available and will have to be developed by the agency itself. Through turn-over studies and other means they can approximate the numbers that will need to be trained. Placement officers know when workers become surplus and whether it is feasible to retrain them for work in another part of the organization. They know the avenues of promotion across organization lines. They can estimate the need for training for promotion to various classes of positions. Although this source of information is, potentially at least, an extremely valuable one, it need not be dwelt on here since it is discussed further in a companion report.⁹

NEEDS AND OBJECTIVES

Since in most organizations the needs for training are numerous, it is usually neither feasible nor desirable to provide for all of them at once. Decision as to what training to undertake depends in good part on the urgency of the need, but it depends also on such considerations as the availability of qualified teachers, instructional materials, and physical equipment.

Training officers who are responsible for recommending what training should be undertaken have found that frequently it is unwise to make too many recommendations at one time. The hurry may not be great for, after all, agencies managed to survive for many years before organized training was even thought of. It is important to go steadily forward; but to present at one time more proposals than the organization can digest, or to present a proposal before the organization is ready to receive it, is to invite disappointment. Some training officers go so far as to advise that no attempt be made to start a specific program *until the need for it is recognized and felt* by the officials concerned, even if it takes a year or more to plant the idea and to develop an appreciation and recognition of the need.

⁹ See the report of the Committee on Placement in this series.

After a specific need has been selected, it is customary to set up *objectives* for the training. These objectives are usually more specific than the objectives or broad purposes which were used earlier in this chapter for the classification of needs. They provide essential guides to direct efforts to give the needed training. They provide a guide to be used also in evaluating the training after it has been given.

Chapter III

Instruction—Where and by Whom

WHERE are employees to receive the instruction they need? By whom is instruction to be given? Instruction may be provided through utilization of outside educational facilities, or it may be given directly by the agency itself. When training is undertaken by the agency, responsibility for instruction may be left in the hands of regular operating officials and supervisors, or it may be delegated to special instructors or a central training unit separate from the other units comprising the organization. Each of these ways may have a place in the training program of an agency. Their advantages, limitations, and applicability in various types of situations will be discussed in this chapter.

UTILIZING OUTSIDE TRAINING OPPORTUNITIES

Before discussing the appropriate place of outside facilities in agency training programs, let us first review briefly the kinds of facilities that are available.

Types of Outside Facilities

Since whatever vocational preparation the young people of America have as they enter upon their careers is the result largely of the training provided by the regular educational system, it is logical to assume that these facilities can make a contribution also to the training of persons after they become employed.

Although this source of training is not geared to the specific needs of public employees, its contribution is not to be overlooked. Much of the knowledge and many of the skills taught are as applicable to public employment as to private. Moreover, the programs of extension courses offered by universities throughout the country provide opportunities at hours that are

convenient to employed persons. Vocational schools and university extension services should be encouraged to help solve the problems of public service training. In many cases they can well afford, and will welcome the opportunity, to adapt their offerings to the needs of employed government personnel.

Even the training regularly offered by educational institutions during the working hours of public agencies may play some part in the training of employees. Few agencies are able to pay employees for full-time attendance at outside schools, but many have found it wise to facilitate the granting of leave without pay for this purpose. Vacation leave privileges in many jurisdictions are sufficiently generous to allow employees to take summer or other short courses. It is not always necessary for employees to pay for this type of training. The Weather Bureau, the Foreign Service, and a number of other federal agencies, having demonstrated that the efficiency of their operations requires that selected employees be sent to universities for full-time courses of study, have secured legislation enabling them to pay salaries and expenses during the training.¹ Taking advantage of the federal grants for training in public health work provided in Title VI of the Social Security Act, many state public health agencies give professional employees educational leave with pay. These developments probably will be and should be extended, particularly in the case of professional employees in fields where rapid change renders obsolete much of their original fundamental professional training.

In addition to offering their regular educational opportunities, universities are beginning to give special attention to the training needs of persons employed in the public service. Even though this significant movement is only beginning, a number of progressive institutions have developed formal programs specifically related to the work of government and presented at times and places suitable to the requirements of employed personnel.

¹ The Comptroller General has consistently ruled that expenditures for this kind of training are not permissible unless specifically provided for by law. For a complete discussion see: "The Comptroller General and Training," by Lionel V. Murphy, *Personnel Administration*, June 1940, pp. 16-22.

The University of Southern California pioneered in providing late afternoon and evening classes especially for government employees, and more recently a program of this kind has been developed in Washington, D. C., by The American University through its School of Public Affairs. This school's program, which is tuned to the needs of federal employees, has grown rapidly since its beginning in 1935 and has gained the respect and cooperation of officials throughout the federal service. Similar work is being done by an increasing number of institutions including Wayne University, the University of Kentucky, the University of Tennessee, and New York University.

A number of universities from time to time make provision for short-term courses of one kind or another. The University of Southern California, through its Institute of Government, each year gives a week of training on a great variety of subjects to several thousand government employees. Other institutions provide short courses for selected classes of state and city employees.

Although university programs in "public administration" are designed primarily for full-time students who have not yet become employed, at least two universities, Harvard and Minnesota, are providing training in public administration specifically designed for government employees who obtain leave for full-time study.

The regular educational system does not exhaust the possible sources of outside training, because other facilities inevitably have been developing in recent years to meet the specific needs of government employees. The provision of training schools has become, for example, a major part of the program of a substantial number of state leagues of municipalities. In this way local governments are in effect pooling their resources to obtain some part of the training needed by their employees and to secure the central administration that is desirable at this level. The programs provided through associations of municipalities vary greatly; in some states these programs are limited to minimum training for police or firemen while in others they are

addressed to a wide range of employees. In New York State, for example, schools have been operated for municipal officials and employees, such as firemen, policemen, finance officers, civil service commissioners, building inspectors, welfare officials, sewage plant disposal operators, water superintendents, food inspectors, milk inspectors, and park officials.

A number of the programs initiated by state leagues of municipalities have been included in the programs of state boards for vocational education under the terms of the George-Deen Act, the provisions of which are described at a later point in this chapter.

While a number of state boards have aided training programs confined to employees of a single government jurisdiction (such as a state or large city government), their greatest services have been to provide "outside" training opportunities for the employees of medium-sized and small local governments.

These programs which serve the employees of a number of local governments take a variety of forms. The most common are:

1. The employment by the state board of an itinerant instructor who travels from city to city offering periodic brief instruction to the employees of that city government and perhaps to employees of surrounding cities as well. It is often the deliberate purpose of such an instructor to establish the conditions for a satisfactory intragovernmental training program where the city is large enough to support it.
2. The provision of instruction in a central school or short course made available to employees of all cities in the state.
3. The provision of instruction in zone schools in a number of key cities in regions into which the state is divided. This may take the form of a short course or of periodic instruction extending over a longer period of time.²

² The advantages and disadvantages of itinerant instruction and zone schools as analyzed by a group of supervisors of trade and industrial education, meeting at Minneapolis in 1939, are cited on page 30. It should be emphasized that the advantages and disadvantages cited by this group are generalizations that may or may not apply to any one specific situation.

Another type of training opportunity which has developed is that represented by the Institute for Training in Municipal Administration, located in Chicago. Sponsored by the International City Managers' Association, the Institute makes available a program of high-grade correspondence courses for the training of municipal officials at the administrative or management level. The list of courses, which now number ten, includes Local Welfare Administration, Municipal Finance Administration, Municipal Public Works Administration, and Municipal Fire Administration. This program is but one illustration

ITINERANT INSTRUCTOR

Advantages

1. Meets need of small community
2. Easier to secure more complete instruction
3. Opportunity for growth of instructor
4. Can supplement local equipment
5. Ease of developing standard materials
6. Ease of supervision
7. Ease of coordination
8. Instructor may have higher prestige
9. Brings in outside ideas

Disadvantages

1. Expensive
2. Turn-over of instructors
3. Competent men may dislike to travel
4. Lack of specialized knowledge—may be overcome by itinerant squad
5. Lack of opportunity to follow up in local community
6. Difficult to organize local financial support
7. May destroy local responsibility for training

ZONE SCHOOL

Advantages

1. Less expensive than itinerant instructor
2. Grouping of small communities makes training possible for employees of these cities
3. Opportunity for exchange of experience
4. Better opportunity for variety and competence of instructors
5. Opportunity to secure attendance and support of other municipal officials
6. May develop cooperation among cities
7. Creates local interest and decentralizes responsibility for physical arrangements by rotating cities
8. Promotes professional growth in zones

Disadvantages

1. Expense and time of student travel
2. May develop into a convention
3. Irregular attendance
4. Remote administrative control
5. Difficulty of financial arrangements
6. Difficulty of coordination
7. Difficulty of follow-up
8. Does not meet needs of smallest communities

of the significant and growing interest in training on the part of associations or organizations of public officials.

The Place of Outside Facilities

From the foregoing discussion it is clear that outside facilities may provide much of the formal group instruction needed by the employees of public agencies. Outside facilities are a boon particularly to small jurisdictions that cannot individually provide this formal instruction themselves. Large agencies are dependent to a lesser degree, but even they find it necessary or desirable to leave certain instruction to regular facilities.

It is evident that educational institutions usually can give formal instruction more expertly than most government agencies. Instruction is their business; they are set up and equipped for that purpose. It is easier, moreover, to secure one good instructor to teach a certain subject in an educational institution serving government agencies than it is for each agency to secure its own competent instructor. Even large agencies with great resources usually find it uneconomical to duplicate existing facilities. An additional advantage of outside instruction is that outside institutions can bring to employees a fresh and far-sighted point of view which may be lacking in an operating agency, concerned as it is with details of day-to-day operations.

In spite of these advantages, outside instruction is subject to serious limitations. Among the reasons why government agencies frequently find it necessary to provide their own instruction are the following:

Although educational institutions are well equipped to teach systematic bodies of knowledge by formal educational methods, they are largely limited to the use of such methods. They cannot teach effectively those skills that are taught best by "on-the-job" methods, and as we shall see (p. 36) it is these skills that frequently constitute the greatest part of the things that employees need to learn.

Outside institutions are limited to instruction in those things that are general or common. In some jurisdictions, particularly cities and towns, the work performed is similar to or even iden-

tical with the work done in others. Since the employees of each must have the same knowledge and skills, it is feasible in these cases to give common instruction in outside institutions. On the other hand, much of the work of some agencies, like those of the federal government, is so specialized and peculiar that only the agency is in a position to give the training that is needed.

Outside organizations are handicapped in attempting to give satisfactory instruction because their instructors cannot easily understand and know exactly what things need to be taught. Moreover, outsiders who are not continually in contact with job requirements cannot readily keep up with the rapidity with which these requirements change.

Even when instruction could be provided feasibly by outside organizations, government agencies sometimes find it desirable to provide the instruction themselves. They may do this so that the instruction will be custom-made—cut to fit the exact needs of the agency. For example, many agencies are giving their own group instruction in letter writing so that this instruction will be in terms of the specific subject matter of the agency rather than in general terms. They may provide their own instruction because in that way they may obtain better attendance, gain greater support and interest of officials, and sometimes (particularly in large agencies) provide the instruction more economically. And, of course, agencies are forced frequently to give their own formal group instruction simply because satisfactory outside facilities are not available.

Administrative Problems

A number of administrative problems that relate particularly to the use of outside facilities may be considered appropriately at this point.

Employee guidance. It will be recalled that the definition of employee training given in Chapter I stressed that it is the process of *aiding* employees to gain effectiveness. The problem of providing guidance is particularly important in outside instruction, because so much of this is of the kind that is taken

voluntarily, and because employees are not likely to have sufficient information to be able to evaluate it or to see its relationship to their careers. This situation calls for a high order of administrative leadership through which supervisors at all levels help their employees to perceive their needs and to find ways of meeting them. In many agencies there is a central point, such as the personnel or training unit, where employees may obtain more detailed and reliable information about training opportunities, as well as a broader picture of possible lines of promotion, than their immediate supervisors can give them. Many agencies are known to distribute to employees summaries of available outside training opportunities which are pertinent to the work of the organization, or to publicize such opportunities in other ways.

Although the technique of counseling cannot be discussed here, it should be emphasized that proper counseling is not "telling" or the giving of advice. Instead, the employee is aided to come to a correct decision by the assembling of facts about (1) his own abilities and limitations, (2) appropriate training facilities, and (3) opportunities for utilizing new skills and knowledge in the agency. Persons who are interested in this subject will find it dealt with in a pamphlet, entitled "Suggestions for Educational Counselors," prepared by the Training Division of the United States Department of Agriculture.

Costs. The problem of meeting costs is frequently even more difficult in the case of outside training than in the case of training conducted by the agency. In the federal government, for example, agencies may not without specific legislation pay for training which they themselves do not give. Yet it is within the administrative discretion of these same agencies to give training, during working hours, that they judge necessary to effective operation.

No rule can be set forth which will indicate when outside training should be paid for by the agency and when by the employee. This much is clear, however: If the training is necessary *from the viewpoint of the agency* and its efficient functioning, it should be provided and it should be paid for by the agency.

It follows that when an employee is required to take training as part of his work he should of course be paid for doing so. Beyond that it is not possible to be definite. No one can insist that the taxpayer pay for training which employees could be expected to have obtained before accepting employment. On the other hand, many private business concerns find it profitable to reimburse employees, in whole or in part, for the cost of training courses that they take voluntarily and that are related to the work of the organization, even when this training is not altogether essential. A similar practice is followed by the city governments of Winnetka, Illinois, and Saginaw, Michigan. Although few public jurisdictions are now able to follow this practice, there is much to be said in favor of contribution to costs by the employer when the training will make for more effective operations even though it may be of primary advantage to individual employees.

Cooperation with outside training agencies. Agencies which use outside facilities for the training of their employees have a definite responsibility to cooperate with the persons responsible for the management of these facilities in their efforts to make the training fit the needs of the agency. Failure to give exactly the kind of training needed is one of the greatest weaknesses of outside training, and this is to be expected because the outsider cannot know precisely what subject matter is required unless he is informed by the agencies which he serves.

It should be clear that the agency has responsibilities of the kind here suggested even with regard to training which it does not itself conduct. These responsibilities must be accepted if that training is to be fully profitable either to the agency or to its employees.

TRAINING CONDUCTED BY THE AGENCY

As the discussion of the use and limitations of outside facilities brought out, only a part of the training needed by an operating agency can be delegated to outside organizations. Even small municipalities must accept responsibility for some part of the training required by employees, and in many agencies the

greater and more important part frequently can be accomplished best by the agencies themselves.

Locating Responsibility for Instruction

"Who is to give the instruction that must be provided by the agency?" is a fundamental question requiring thorough consideration by the top officials of any agency that places its training on a systematic basis.

Broadly considered, there are two major ways of providing for instruction. The first way, which is used at least informally in probably all agencies, is to leave in the hands of regular operating officials and supervisors responsibility for instructing their employees. The training in each unit is given by the supervisor or by subordinates who are responsible to him. The other method is to provide special instructors or a central training unit separate from the other units that comprise the agency. When instruction is the responsibility not of the officials in charge of each unit but of another unit set up outside their direct line of authority, instruction is said to be *centralized*.³

Whether instruction should be given by the regular supervisory personnel or whether it should be centralized has been the subject of much controversy. Extremists on the one hand do not recognize an activity as training unless it is given in a classroom at some central point, or if they do recognize it as such they label it "informal" and dismiss it from consideration. Some persons in central training units even try to prevent operating officials from training their own employees. Extremists on the other hand maintain that the only effective training is that given by each supervisor to his subordinates "on-the-job"; centralized training, which takes the employee away from the work situation, is considered to be futile. While the number maintaining such extreme views is not large, there are probably many people whose views are only in degree less biased.

³To avoid possible confusion it should be stressed that this discussion of centralization is concerned with the giving of instruction rather than with the administration of a training program as a whole. Instruction can be decentralized even when there is a considerable degree of central administration. In fact, it is quite generally agreed that some degree of central administration to provide coordination and leadership is always highly desirable. (See Chapter VII.)

On this point the public service can profit by the experience of private business. Shortly after the World War centralized training had a great vogue, and in some concerns large specialized staffs of "experts" were set up to do all the training. When this proved to be unsound, the pendulum swung to the other extreme. For a period central training was in disrepute; and the prophets of management proclaimed that training "on-the-job" was the only practicable approach. Since this other extreme view was found to be equally unsound, private employers appear to be swinging back to a middle ground.

It is coming to be realized that there is an appropriate place for both centralized and decentralized instruction. Let us, therefore, first examine the case for leaving instruction in the hands of supervisors, and then analyze the conditions under which instruction has been successfully centralized.

*Instruction by regular supervisors.*⁴ The instruction of employees by their superiors is the traditional approach. A recognized component part of the work of supervision is that of guiding and assisting employees to learn how to do their jobs. There are a number of reasons why supervisors must retain at least a share, and generally a large share, of responsibility for the instruction of their subordinates.

The first reason why this is true is that the well-known advantages of "on-the-job" methods apply whereas these methods cannot be utilized when instruction is given centrally. Morris S. Viteles, in summarizing the findings of industrial psychologists, states that, ". . . the burden of evidence definitely supports the stand that training on the job itself, under actual conditions of work, is the only certain method of furthering the development of skills necessary for successful accomplishment." (See Reference No. 51, p. 256.) When specific job skills are to be learned, generally they are learned most surely by performing the actual job. The application or transfer of skill developed in another situation is at best uncertain. The factor of interest or incentive, moreover, is on the side of learning in the natural work situation

⁴The term "supervisor" as used here refers not merely to the "first-line supervisor" but to anyone, on any level, who has direct supervision over other employees.

where the employee is faced with a very real and immediate necessity for learning so that he can produce.

In many situations, moreover, the only economical and feasible way to train is by utilizing the services of regular operating supervisors. Small agencies could not afford to maintain special instructors even if it were possible to find instructors qualified to teach all the things employees need to know. Frequently, moreover, the work is of such a specialized nature that only those who do it or supervise it are qualified to teach it. In agencies where many different kinds of work are done, it is entirely out of the question to employ specialists to teach all of these things; to do so would require a training staff as large as the entire supervisory staff.

The danger of splitting responsibility for employee performance from responsibility for instruction to achieve this performance is another frequently emphasized reason for leaving instruction in the hands of operating supervisors. It is pointed out that no agency can afford to be placed in a position in which supervisors are able to evade responsibility for failure by offering the alibi that their employees are inadequately trained—by someone else. Moreover, it is a fact that supervisors are likely to belittle and undermine instruction for which they are not responsible, or at least to lack interest in it.

It is for these and other reasons that an increasing number of public administrators are insisting that everyone in a position of supervision over employees be a trainer of these employees. In the average agency, perhaps the greater part of the needed training can be accomplished in this way. Harold B. Bergen, who as a nationally known management consultant has had the opportunity of analyzing the problems of many organizations, estimates that in the typical organization approximately 85 per cent of the necessary instruction can be provided most effectively through the regular supervisory force. He hastens to add that this percentage varies widely from organization to organization.

Although it is a fact that in many agencies little training is actually accomplished when it is "left to the operating people,"

this does not necessarily mean that instruction should be centralized. Usually the failure has been due to the fact that supervisors had been given no understanding of their responsibilities for training and no instruction on how to proceed. The Forest Service, the Socony-Vacuum Oil Company, the Philadelphia Electric Company, and many other organizations have demonstrated conclusively that much training can be accomplished most effectively by regular operating executives and supervisors *when systematic efforts are made to qualify them to instruct their subordinates. The qualifying of supervisors to carry out their responsibilities for employee training probably is in most agencies the one most fruitful training activity that can be carried on.*⁵

Centralized instruction. The evident advantages of training by supervisors do not, however, provide a basis for concluding—as some have—that this is the only way. There is a very important place for centralized instruction. Training by supervisors has its limitations, and it has been demonstrated that there are circumstances under which centralized instruction is definitely more effective and economical.

When training needs cut across organization lines, frequently it is feasible and often more economical to give instruction centrally. In this way unnecessary duplication of effort is avoided. In many organizations it has been found desirable, for example, to centralize the acquainting of new employees with the objectives, functions, policies, and regulations of the agency as a whole; and in cities throughout the nation the training of police and firemen is conducted successfully in central schools.

Centralized instruction is particularly feasible when a systematic body of knowledge is to be taught and when the more formal training methods are appropriate (see Chapter V).

Central training is usually called for when the knowledge and skills needed by employees are not possessed by their supervisory officials. No supervisor can teach more than he himself knows. In many cases the supervisor does not and need not

⁵A pamphlet, "Training Your Employees" (Reference No. 20), published by the Society for Personnel Administration, has proved useful to many agencies in giving supervisors an understanding of their responsibilities for employee training.

possess the skills exercised by technical employees under his direction; and in such cases he can hardly be depended upon to teach these skills. In other circumstances, as when a new agency is put together rapidly, supervisory officials may be as ignorant of important facts as their employees; and under these circumstances it has been found essential to provide special instruction. The Social Security Board, for example, found this to be the only feasible way of teaching its rapidly growing staff the complex provisions of its laws and other technical information. ✓

Supervisory officials cannot usually be expected to teach the knowledge and skills that their employees would need for promotion or transfer to positions outside the immediate unit, and when such training is considered necessary it must be provided by other means.

There are circumstances under which it is desirable as well as feasible to provide special instructional facilities in order to relieve already overburdened supervisory officials. Although the plea that "we don't have time for training" probably is most often an unjustified excuse, there are times when supervisors cannot be expected to assume the whole instructional burden. For example, a second reason why the Social Security Board has provided central instruction on a large scale appears to be that during the hectic formative years supervisory officials simply did not have the time to provide the instruction themselves. Incidentally, it is significant that instruction in that agency is now being decentralized to a considerable degree.

Integrating the two approaches. It is generally agreed that when instruction is centralized, care must be taken to integrate this instruction with the instructional responsibilities still retained by supervisory officials.

Since the person who is in charge of a unit of workers is responsible for their performance and since performance is so dependent on training, supervisory officials should have a great deal to say about any instructional facilities that are set up for the benefit of their employees. Such facilities should be designed to supplement effectively the instruction still given by supervisors. Supervisory officials should be given a part in de-

termining the nature of instruction to be provided, should often cooperate in its development, and should be kept informed regarding its progress. Particular care should be taken to assure that supervisors look upon centralized instruction as a service to them rather than as an infringement on their prerogatives as instructors on the job.

In a number of instances combinations of the two major approaches have been worked out which preserve the advantages of each. This was done, for example, in the letter writing training program of the Farm Credit Administration. Here it was recognized that supervisors generally were not qualified to teach their employees all the technical aspects of letter writing, and therefore a correspondence counselor of wide experience was retained. It was recognized also that the instructor could not be qualified to deal with the *content* of the letters written in all the units. In the conferences that were held, therefore, supervisory officials led discussions of problem letters and dealt with questions of procedure and policy, while the correspondence counselor gave instruction on the technical aspects of letter writing. The correspondence counselor also gave additional instruction in letter writing methods to supervisors and trained them to continue the instruction of their subordinates after he withdrew.

Administrative Problems

The purpose of this section is to discuss a number of common administrative problems that are not dealt with elsewhere in this report but that are faced by officials directly responsible for instruction.

Before discussing problems of this type, however, we should note that there are problems of another type which need only be mentioned at this point since they are dealt with fully in Chapter VII, *The Central Training Unit*. This second type of problem grows out of the fact that the training in any agency is necessarily decentralized to some degree. Since decentralization means that training is conducted by a variety of people in a variety of places, some kind of central influence is highly desir-

able. This central influence, which may be wielded by the chief administrator or by an individual or agency to which such responsibilities are delegated, aims to provide leadership, expert advice and assistance, and coordination. Officials of units where training should be done may have to be awakened to these needs and may have to be stimulated to provide needed training; these officials may have to be "sold" on the meaning and value of systematic training. Officials may require advice and assistance in ascertaining needs, in developing subject matter, in organizing programs, in selecting training methods, and in other phases of the work. There may be need for coordination or for review of the training work being carried on in diverse parts of an organization. These and related subjects which are discussed in Chapter VII indicate that the responsibilities of a central training specialist are numerous and heavy even when responsibility for giving instruction is decentralized.

Meeting the costs. Although one of the primary purposes of employee training is to save money by increasing the effectiveness of the working force, the fact remains that a money investment frequently must be made and that frequently it takes time before the investment pays dividends.

It is probably true, however, that the costs of training are usually overestimated by the uninitiated. Pretentious centralized training schools with special instructors are of course likely to be expensive, but facilities of this kind are the exception rather than the rule. Much training can be accomplished with resources already available.

Untapped resources are to be found often in the knowledge and skill of persons already employed in the agency. By providing the setting and by developing the ability of these persons to impart their knowledge and their skills to others, a great deal of the essential training frequently can be accomplished at little or no additional cost. Supervisors who once only gave orders become on-the-job trainers; and many agencies have developed from among their own personnel excellent instructors for formal courses. This teaching is done by employees in addition to their other duties.

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Much can be accomplished without additional expenditure by utilizing existing physical facilities in the community, by obtaining help from the state department of vocational education or from the schools and colleges, by mutual cooperation with other agencies in the exchange of instructors and training materials, and by other means.

When additional expenditures are necessary they sometimes may be met from the funds regularly allotted for administrative purposes, because training that is essential to an agency is a legitimate charge on administration. Special funds for training, however, become basically a matter of budgetary and legislative decision, and as such they may be difficult to obtain. This difficulty of obtaining approval of requests for appropriations makes it imperative (1) that the proposal be sound, specific, and demonstrably necessary for the good of the service, and (2) that the proposal be presented in accordance with sound salesmanship in the best sense of the term. Although in many jurisdictions requests for training appropriations are turned down with discouraging regularity, the number of requests that have been granted when the proposals were both sound and well presented is significant.

Financial contribution of employees to the cost of their training under some circumstances is feasible and not undesirable. In the federal service, for instance, a number of agencies such as the Department of Commerce, the Farm Credit Administration, and the Home Owners' Loan Corporation find it valuable to offer to their employees appropriate training courses on a voluntary, after-working-hours basis. Small fees are charged to meet costs of instruction since it is not permissible to pay these instructors from federal funds; other costs are absorbed administratively.

The costs of training in public service agencies may under certain conditions be met in part by federal funds made available by the George-Deen Act. The following statement regarding this source of funds has been prepared especially for this report by J. C. Wright, Assistant Commissioner for Vocational Education, United States Office of Education:

✓ In 1917 Congress passed the Smith-Hughes Act appropriating funds which are apportioned to the various states to assist in financing state and local programs of vocational education in agriculture, home economics, and trades and industries. The funds thus provided are placed under the control of the state boards for vocational education, and any educational programs which are to receive aid must be conducted in accordance with the plans and under the supervision of these state boards. In 1936 another Federal Vocational Act—the George-Deen Act—was passed, authorizing the ✓ appropriation of additional funds to be administered under the general conditions of the Smith-Hughes Act.

Section 6 of the George-Deen Act modifies the conditions applying to the use of the funds for part-time education in trades and industries by defining the term "trade and industrial subjects" to include training for "public and other service occupations." This modification enables but does not compel state boards for vocational education to use federal funds, appropriated for trade and industrial education, for the training of public employees in part-time schools and classes.

The funds authorized by the George-Deen Act for trade and industrial education range annually from a statutory minimum of \$20,000 for states having small populations to slightly more than \$500,000 for the State of New York. These funds may be used, at the discretion of the state boards for vocational education, for the training of public employees (federal, state, and local governments). This is only one of the types of training for which these funds may be used, however, and the decision as to the use rests entirely with the state boards. In any case, the expenditures are subject to the following restrictions of federal statutes:

1. Every dollar of federal money expended must be matched by 50 cents of state or local money, or both, expended for the same purpose. This matching provision increases 10 cents each year beginning with the fiscal year ending June 30, 1943, until it reaches dollar for dollar matching in the year ending June 30, 1947, and each year thereafter. Under a federal aid system it is not possible to use funds from another federal agency for matching purposes.

2. Federal funds for trade and industrial education and state or local funds for matching purposes may be used only for the payment of "salaries and necessary travel expenses of teachers, supervisors, and directors." (Funds are provided under a separate section of the Act for use, by the states, in training teachers.)

3. The instruction for which federal aid may be secured must "be given in schools or classes under public supervision or con-

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trol." Training can be organized by the public schools, or by other governmental agencies, but in case federal funds are to be secured as aid, it must be given under the supervision and with the approval of the state board for vocational education.

4. The instruction for which federal aid may be secured must "be of less than college grade." A course is considered as meeting this condition when:

- a. College entrance requirements are not made prerequisite for admission.
- b. The objective of the instruction is to give training which is needed by workers in specific occupations or fields of work, and the instruction is based upon an analysis of such needs.
- c. The training program is not a part of a college course leading to a degree.
- d. The training program is not required to conform to the conditions governing a regular college course.
- e. The instructors meet all the provisions of the State Plans for Vocational Education as to practical experience and professional training.

5. Teachers, supervisors, and directors must meet the qualifications of State Plans for Vocational Education, which are approved by the United States Office of Education.

Inasmuch as all federally aided programs of vocational education are administered by state boards for vocational education, any governmental agency desiring assistance under the George-Deen Act should consult the appropriate state board for vocational education. Even where it is found that all available federal and state funds are committed to other purposes, state boards can often be of real assistance by way of providing technical services of full-time staff members in the organization of a program. These services may consist of training teachers, helping to prepare job analyses, assisting in planning and organizing courses, and checking on the results of work done.

Making arrangements. In preparation for formal training programs, many detailed arrangements, too numerous to list completely, must be made. Instructors or conference leaders must be selected and perhaps trained. Suitable physical facilities and equipment have to be provided. Arrangements must be made to secure text and other materials. Schedules of meetings must be prepared. Decision must be reached as to whether the training is to be taken voluntarily on employees' own time or whether it is to be required during official working hours. On

the basis of the amount and nature of the subject matter, the available time, the ability of the trainees, and the methods to be used, the amount of time to be devoted to the training must be determined. The length and number of meetings must be decided upon. Employees must be notified, and arrangements for their release from regular duties must be made if the training is not being conducted by their superiors. In the case of voluntary training, considerable attention must be given to acquainting employees with and interesting them in the opportunities for training.

Gaining employee interest and active participation. The success of any training program is dependent, in the last analysis, on the attitudes of employees and on their desire to learn. In many organizations it is necessary to take active steps to promote employee interest and participation; and this is just as important when training is required as when it is voluntary. Employees can be lectured to, be required to sit in conferences, and be given material to study—and they can go through all the required motions—but no training takes place unless the employees actively participate in the training process. Only the learner can do the learning, and interest and a will to learn are basic to successful training.

Often it is necessary to overcome unspoken (or sometimes loudly spoken) resistance to training efforts—a rather natural resistance arising from suspicion of formal educational methods, fear of ridicule, lack of confidence, resentment against the implication that improvement is necessary, or just plain complacency and reluctance to have customary habits disturbed.

The wise trainer remembers that he is dealing with adults and that traditional educational methods which may work very well in the schoolroom may not succeed in an operating agency. Frequently it is advisable that a “schoolroom atmosphere” be avoided. Experience has shown that the use of conference tables in place of the traditional classroom setup is helpful in overcoming objections to “going back to school.” Particular attention should be given to making the learning process interesting; to giving encouragement and building confidence; and to mak-

ing sure that the training is clearly related to the employees' own needs.

The prestige that organized training enjoys in an agency has a significant effect on employee interest, and this prestige is dependent to a large extent on the attitude of their chiefs. If supervisors are not favorable to training carried on outside their immediate units and tell their subordinates not to "take that training stuff too seriously," the chances are that training will not be taken seriously. Largely because of this it is frequently said that "training must begin at the top." While this statement is not literally true since training may or may not be needed by top officials, it is true that an agency's training efforts are almost sure to fail unless they are firmly backed by officials.

Interest and a will to learn are engendered when training is tied up with employees' natural desires to be looked upon favorably by their superiors and fellow workers, to do a job a little better than the next man, to gain recognition and prestige, and to obtain financial advancement. Although the harnessing of these forces must be done with caution and propriety, surely it is legitimate to utilize them to develop employee interest and participation in training.

Since the desire for promotion and financial advancement is such a strong incentive to employees to become better trained, the extension of training is dependent on a jurisdiction's general personnel policies and practices. Training does not flourish in a jurisdiction where promotion, retention, and other actions affecting employees are based on political or personal considerations rather than on merit and qualifications.

An important way of building interest is that of giving employees a part and a voice in developing the training program. It is a widely recognized fact that people think better of an activity when they share responsibility and take part in it.

Many agencies, some to their sorrow, have found that training cannot be fully effective unless employees and executives on all levels recognize it as being a natural and necessary activity, of value to each individual personally as well as to the organization as a whole.

Chapter IV

Selecting and Developing Content

THUS far we have discussed ways of ascertaining needs for employee training and the question of where and by whom the training which meets those needs is most appropriately given. As Chapter III points out, training facilities which meet certain needs may already exist. When it is decided, however, that a unit of training is to be given by the agency, there arises the problem of planning the detailed subject matter and preparing this subject matter for presentation.

A case in point is the experience of the federal agency which discovered a need for training secretaries to perform their non-stenographic, responsible duties more efficiently. After it was decided that the training was to be given by the agency, a committee of the leading secretaries, in collaboration with the training staff, selected and developed the content. That is, they determined what "habits of thought and action, skills, knowledge, and attitudes" a secretary needs in order to become a thoroughly effective secretary, and they prepared materials to be used in the training.

This chapter, then, discusses the ways in which government agencies have most successfully determined just what their employees must be taught and the ways in which this training content has been prepared for presentation. These processes are effective to the extent that they are related to the objectives of the training and to the needs and abilities of the trainees.

OBTAINING SUBJECT MATTER

Ways of obtaining subject matter for employee training vary all the way from the searching analysis of operations to the use of ready-made text material. Let us examine some of these methods briefly.

Analysis

The most fundamental of all methods used in obtaining the content of a unit of training is analysis of the work carried on in the agency. By analysis is meant merely a thorough study of activities as a basis for training designed to improve the performance of those activities. Analysis means study of the work not only as it *is* done, but as it *should be* done. Thus this concept goes beyond job analysis in the traditional sense.

It is essential that analysis be carried on in such detail and with such clarity that the skills and knowledge required for the performance of each duty may be determined. In their study of secretarial jobs, Charters and Whitley (*See Reference No. 9, p. 75*) found 871 separate duties, such as:

Ordering office supplies

Sending telegrams

Directing callers to proper office or department

Maintaining a daily reminder system.

Nor is the analysis confined to the usual, everyday aspects of the job. In all positions, even those of a routine nature, difficulties, problems, and unusual features occur from time to time. It is just as much a part of the employee's job to cope with these problems successfully as it is to carry on his usual activities. The analysis includes a description of what the difficulties are, what the employee must do to solve them, and what additional qualifications they necessitate.

Analysis by those closest to the work. Previous chapters have pointed out how the employee's immediate supervisor is frequently in an excellent position to determine what training is needed by the employee and often actually to do the training himself. By the same token the supervisor can make a detailed study of the employee's duties and, using the results of this study as a basis, can determine what specific knowledge or skills are to be taught. It was the supervisory officers of the United States Immigration Border Patrol, for example, who on the basis of their detailed knowledge of the work of the patrol

inspectors decided exactly what these inspectors should be taught.¹

Reference has been made in Chapter II to the training formula developed by the Socony-Vacuum Oil Company and used by the United States Civil Service Commission and other agencies. When step one, the analysis by the supervisor and the employee, is conducted in sufficient detail to make clear what specific knowledge and skills are required for best performance, it is possible as a subsequent step in the procedure to determine exactly what "helps and information" must be administered to develop the desired skills and knowledge.

An illustration will clarify the relationship of this more detailed type of analysis to that described in Chapter II. In ascertaining the needs, it may be found that a few policemen who are assigned to license work need special training to carry out this assignment effectively. It is a further step—and the one with which we are concerned in this chapter—to analyze the duties and to determine exactly what should be included in the training.

Analysis of operations by the supervisors or employees engaged in performing those operations may also be carried on through committees. The first step taken by the committee of secretaries mentioned earlier in this chapter was to analyze secretarial jobs, breaking them down into their component duties. In the same way other committees of employees can conduct analyses and select the content of units of training.

A type of committee which is used in some jurisdictions to conduct analyses as bases for training is that which represents different interests and levels within the agency. An example of this type was a committee in one federal bureau which studied the work of classifiers, searchers, and other clerks in a files section; the results of the study provided a basis for planning the subject matter of a series of meetings to help these employees acquire additional knowledge as a means of improving their

¹ From an unpublished address by W. F. Kelly, Chief Supervisor of the Border Patrol.

working efficiency. This committee was made up of the supervisor of the files section, an expert on filing procedures, and a member of the training staff. Each contributed to the deliberations from his own point of view, and the end result was a well-planned unit of training.

Similarly, in a number of states it is standard procedure to organize committees of municipal employees to prepare analyses as bases for training. For example, the Committee on Employee Training of the Municipal Electric Utilities Association of New York State recently met to prepare for a central training school for light boards, superintendents, and staff members of municipal electric utilities. All three types of prospective trainees were represented on the committee, according to Albert Hall, Chief of the New York State Bureau of Public Service Training.

Analysis by others. In more complex situations where supervisors and employees are not in a position to conduct the analysis or where it is desired to put this function in the hands of someone with a central, over-all point of view, another approach is necessary. Training officers, personnel technicians, or other specially trained employees are often made responsible for the analysis. They use a variety of methods in obtaining information about duties and qualifications: interviewing individual employees and supervisors; obtaining written statements from employees and supervisors; observing the work as it is performed. Frequently a combination of methods is used to assure that the information obtained will be as complete and accurate as possible. Observation of the employee at work leads to questioning; answers to questions result in a need for further observation. Some questions may arise which can be answered only by the supervisor; others must be directed to the employee. As Greene points out, it may be necessary to continue questioning and observing for a considerable period of time, until all the difficulties and problems of the job have been discovered. (*See* Reference No. 18, pp. 127-29.)

Many routine production jobs are susceptible of analysis by such advanced and refined methods as those worked out by Gilbreth, Mogensen, and others. Clearly, analysis of this type must

be carried on by experts, since it requires special skills which ordinary supervisors and employees do not possess.

In Pennsylvania, Virginia, California, Michigan, and New York, analyses for training purposes are made by training units which are part of state boards for vocational education. It is the function of these units to assist both state and local units of government to organize and administer training courses.

In agencies where a classification plan is in effect, the job description may serve as a point of departure for the analysis. Yet in few cases, if ever, is the usual job description an adequate analysis to serve as a basis for building subject matter. Its purpose is to indicate, for pay purposes, differences in levels of difficulty and responsibility. It can hardly be expected, therefore, to describe duties and work methods in such detail as to make possible the planning of specific training activities which will correct and improve these work methods.

An example of analysis. An analysis which breaks down the job into detailed activities makes it possible to determine what skills and knowledge the employee must possess in order to handle each activity with maximum effectiveness. The following table shows how this has been done in the case of a policeman assigned to license work (*See Reference No. 1, pp. 64-65*):

JOB ANALYSIS OF POLICE SERVICE— LICENSE WORK

Type assignment	What he does	What he should know
License bureau:	Maintains and checks index file.	Index and filing system. How to keep "reminder file" on citation cases.
1. Office detail.	Maintains records of all licenses purchased. Notifies district investigator of all overdue citations. Types reports of findings of field investigators. Receives reports of patrolmen in district of new places chargeable with licenses. Handles all correspondence in respect to license matters. Forwards checks and money received to city clerk.	How to keep records and re- ports of department. How to operate typewriter. How to check advertising sec- tion of daily newspapers, and record and index new busi- nesses chargeable with li- censes. License ordinances and their application. District and city boundaries. How to answer correspondence relating to license matters.

<i>Type assignment</i>	<i>What he does</i>	<i>What he should know</i>
2. Field investigation.	<p>Contacts all business places to ascertain if chargeable with license.</p> <p>Ascertain if license has been paid.</p> <p>Makes recommendations for changes, eliminations, or additions to license ordinances based on data collected.</p> <p>Makes arrests.</p> <p>Issues citations.</p> <p>Secures warrants.</p> <p>Makes records of licenses paid.</p> <p>Keeps daily report sheet.</p> <p>Checks yearly affidavits for fraudulent business.</p>	<p>Relationship between license bureau and city clerk's office.</p> <p>How to check and investigate a business to determine license requirements.</p> <p>How to ascertain and classify business concerns chargeable with licenses.</p> <p>How to make an arrest.</p> <p>How to secure warrants for flagrant violators and make arrests.</p> <p>How to make notations on index cards and report to proper authorities.</p> <p>How to make monthly reports.</p> <p>License ordinances and their application.</p> <p>How to maintain goodwill of actual or prospective purchasers of city licenses.</p> <p>How to ascertain whether trucks are operating under city ordinances or state regulations.</p> <p>Jurisdiction of and how to handle citations for license violation.</p> <p>How to make arrests.</p> <p>How to make reports to local police division and to the state public utility division.</p> <p>Relationship of state and city governments.</p> <p>Ordinances and statutory regulations concerning load limitations of motor vehicles.</p> <p>City ordinances and application to trucks in city limits.</p> <p>How to ascertain and classify if business is chargeable with a license.</p> <p>How to investigate and check information.</p> <p>How to secure information concerning license applicants.</p> <p>How to make necessary reports.</p> <p>When and where to issue and file reports.</p> <p>City license ordinances and their application.</p> <p>When police permits are necessary.</p> <p>How to determine when an alleged wholesale business is in fact a retail business.</p>
3. Call duty, motorcycle police.	<p>Checks tonnage of trucks to determine license classification.</p> <p>Determines if trucks are operating under proper license.</p> <p>Makes arrests for violations.</p> <p>Makes all essential reports.</p> <p>Secures assistance from or assists other agencies.</p>	
4. Call duty, patrolman.	<p>Checks markets, transient motion-picture companies, and peddlers for licenses.</p> <p>Collects license fees from transients.</p> <p>Ascertain before issuing license if person has secured permit from police commission when necessary.</p> <p>Contacts record bureau to determine if applicant has ever been arrested.</p>	

Obtaining Content without Detailed Analysis

Government agencies do not necessarily conduct a complete analysis every time the subject matter of a unit of training is to be planned. The preliminary study of needs and the objectives which are set up may be sufficient to indicate the content clearly. If, for example, new legislation is passed which affects the operations of several divisions of an agency, it is obvious that the personnel of those divisions must be informed of the changes. The legislation becomes the subject matter of the training, and further analysis is unnecessary. Exhaustive analyses may also be superfluous in much of the training planned by operating supervisors or by some of the committees discussed above. Two other ways of obtaining subject matter without analysis remain to be discussed.

Experts. Technicians and specialists within the agency are often called upon to assist in selecting and developing the content of a unit of training. One agency which set up a course to train employees in its own accounting procedures assigned to the supervisor of an accounting section the work of planning and preparing the subject matter, as well as of actually conducting the course.

In much the same way a number of agencies have brought in experts from outside the service to plan and conduct various types of training. Training in letter writing and in the operation of tabulating machinery are but two of the fields in which this has been done. The outside expert, before making detailed plans, must make some study of the agency's work methods and must consult closely with operating supervisors to be sure that the training will be adapted to the agency's operations. His is the responsibility, however, for working out the content.

Use of materials describing the work of the agency. A variety of materials describing the functions of the agency and of its parts are available in most jurisdictions. Based on studies of the actual work performed, they are convenient sources of subject matter used in teaching employees about the processes in which they take part.

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First there are materials describing the work of the agency as a whole. Such descriptions may appear in bulletins and circulars issued to the public to explain the services the agency makes available. They may appear in periodic official reports to the chief executive or to the legislature. Sometimes they are found in written explanations accompanying financial statements. These descriptions of the functions of the agency as a whole contain subject matter which is well adapted to a number of training needs. It is useful in giving new employees an understanding of the objectives to whose attainment they are contributing; in developing coordination and general "organization fitness" among present employees; and in informing key employees of other agencies which must operate in close collaboration with the agency described.

On a more specific plane are materials which describe the work of departments, divisions, or sections within the agency. Increasing use has been made in recent years of organization charts as devices to inform chief executives, legislators, budget officers, the personnel agency, and management analysts. A number of agencies, particularly those in the federal service, have developed written materials in place of or as a supplement to the charts in describing the functions of each organization unit and its relationship to the rest of the agency. These materials, like the more general descriptions of the work of the agency as a whole, are valuable as a source of the content of programs to "orient" new employees and to develop increased understanding and to improve collaboration on the part of present employees.

Even more specifically related to what employees actually do on the job are materials stating the order in which various functions are to be performed and the units or employees which are to perform them. Manuals of procedure are familiar devices for guiding employees in their everyday work.² A less common type of material is the work flow chart, which represents procedures graphically. As descriptions of how the work is done

²These descriptions of work procedure may be supplemented by periodic reports of work accomplished by units. Such reports add statistical detail and concrete illustrations to the more basic training content.

when it is done correctly, these materials furnish a sound basis for training designed to improve the performance of employees already on the job, to prepare understudies for promotion, to retrain employees who have been in other lines of work, and to guide new employees.

Use of Existing Materials

The government agency which is preparing a unit of training will probably find available considerable material which apparently can be used without change. Within the agency there are written descriptions of objectives, processes, and duties. Outside the agency there are published texts and professional and technical journals in fields of activity ranging all the way from stenography and filing up to advanced statistics, corporate accounting, and public law. Use of these existing materials makes it possible to save time, trouble, and expense, and to take advantage of the experience of others.

In fact, the advantages are so obvious that they are accompanied by a very real danger—the danger of using material which appears to be pertinent but which actually bears insufficient relation to the objectives of the training and to the needs of the employees being trained. To use an example which is probably extreme: The fact that competent fire fighters need some knowledge of hydraulics is no excuse for requiring a rookie fireman to study a text on this subject. It was written for other purposes and will probably be over his head. The fireman should know enough hydraulics to help him put water on fires, not enough to enable him to design an irrigation system or to keep water out of a coal mine. It is perfectly appropriate, of course, to assign the rookie a clearly written article or booklet on hydraulics for firemen, supplemented by such demonstrations and oral explanations as may be necessary.

The suitability of existing materials may be tested by the methods we have discussed for obtaining subject matter. The inappropriateness of the text on hydraulics becomes apparent when it is examined in relation to an analysis of the work of the fireman or when it is referred to a fire chief or to a group of

fire captains engaged in planning training for rookie firemen.

It "makes sense" to utilize existing materials which are well adapted to the group to be trained and to the purpose for which it is to be trained. When they are not available, the solution is not to use materials which are *nearly* right, but to develop or to devise subject matter *exactly* suited to the needs and objectives of the training.

PREPARING SUBJECT MATTER FOR PRESENTATION

When the major problem of determining the subject matter of the unit of training—of deciding what shall be taught—has been dealt with, there remains the subsidiary problem of preparing the subject matter for presentation to the employee. The work of the policeman assigned to the license bureau was analyzed, and the things he must know were listed. The next step is to prepare suitable materials for the use of the policeman and his instructor.

Guiding Considerations

The basic principle in preparing the subject matter of a unit of training has already been implied: *The material must be carefully adapted to the objectives of the training.* This is of course true whether existing materials are revised or new materials are prepared. Related to and subsidiary to this major rule are other guiding considerations:

1. The form in which the material is prepared depends upon the training *method* to be used. Reading assignments require text material, lectures need outlines, films must have scripts, and so on. Training methods are discussed in some detail in Chapter V where it is pointed out that they, like materials, must be closely related to needs and objectives.

2. The *depth* of the subject matter must be planned carefully with reference to those being trained. The material must not be so difficult that it is not understood nor so easy that it is ineffective and tiresome.

3. The *relative importance* of the various parts of the material must be determined and given appropriate emphasis. What

is essential and of practical value must be distinguished from what is merely supplementary. The amount of time to be given to each topic must be considered.

4. The *order* of presentation must be planned so that the learning process will be as rapid and effective as possible. Certain topics must be learned as prerequisites to other topics, but the order of learning may not be the same as the order of performance. Many accounting courses, for example, take up ledger entries before journal entries.

5. As far as possible, the material should be *interesting*. It is desirable to bring out points of interest in the subject matter and frequently it is possible to inject added elements of humor, human interest, or drama. Care should be taken, however, that the entertainment value does not detract from the educational value.

6. Material to be used by the employees being trained should be prepared with a view not only to immediate value as training material, but also to its suitability for *reference* purposes after the training is completed.

Types of Training Material

These considerations are equally applicable to all the various ways of preparing subject matter for presentation. The variety of types of training material is so great, however, that a comprehensive discussion of them in this report is out of the question. All that can be done is to indicate briefly some of the uses of each type.

Job instructions and procedure manuals. A basic type of training material which is in wide use throughout the public service is that which tells the employee in detail how to perform his duties. For jobs of a repetitive nature instruction sheets or cards are prepared listing the steps to be followed. These instructions are useful principally to new employees or substitutes; the employee who remains on the job for a while soon becomes so familiar with the duties that he does not need the written instructions.

To assist employees whose duties are more complex, manuals of procedure are prepared. These are detailed explanations of the procedure to be followed which not only explain the employee's own duties but also enable him to see how his duties fit into the whole work process. Procedure manuals assist experienced workers in settling problems which are out of the ordinary, in addition to helping new or substitute employees become familiar with their duties. The most effective procedure manuals are those which are complete and detailed enough to prevent doubts or errors from arising even under unusual circumstances. Despite technical detail, the most effective manuals are so clearly expressed that they are readily understood by the employees who are to use them. It is also important that the manuals be indexed clearly and completely.

A related type of training material is the work flow chart, which represents procedures graphically. It is useful in giving a quick, clear idea of the more important steps in the work procedure, but its lack of detail reduces its usefulness as an aid in on-the-job training.

Plans. A number of types of training which do not involve the use of written materials nevertheless require written plans of what is to be done. A supervisor faced with the problem of breaking in a new employee on a certain job may prepare a plan of the assignments to be given the newcomer, arranging them in order of increasing difficulty. Similarly, written plans are of considerable assistance in training through apprenticeships, internships, and even inspection tours.

Such written plans need not be long and detailed to be workable. A brief outline stating what is to be taught; when, where, and how the training is to be done; and who is responsible for doing it, is sufficient. A very necessary feature of most plans is flexibility to allow for unforeseen difficulties. A trainee, for example, who is being trained by means of a series of assignments in a number of different divisions, need not leave a division in the middle of a project simply because the plan says he is due to leave. The plan, in short, may be regarded as a point of departure, rather than as a destination.

Outlines, syllabuses, agenda. Plans for training which is conducted in a more formal manner are called a variety of names. A list of the topics to be covered by a lecturer is an outline. A plan describing the assigned readings and study topics in a formal course is a syllabus. Topics listed for discussion at a conference are agenda. A detailed plan for a training course, giving the order of topics, a list of materials, and an explanation of methods, is an instructor's manual. Despite points of difference, these plans are basically similar.

They are blueprints for group training—plans in which such problems as depth, emphasis, order, and timing have been settled in advance. They provide for both *what* is to be presented and *how* it is to be presented. They are, therefore, far more detailed and far less flexible than plans of the type discussed in the preceding section.

Text material. Texts are the most familiar and most widely used of all types of training material. They are of principal value when the training objective is to impart knowledge rather than to teach skills and habits.

Text material of all kinds is so abundant that, as we have seen, the temptation is very strong to use existing materials which merely appear to be appropriate. Yet the trainer cannot stand over the employee as he reads and say, "This page is important for you; the next page is not." *All* of the text material must be adapted to the needs and objectives of the training. The material must be on the right level of difficulty for the group; it must contain adequate emphasis of important points; and it should be interesting. For these reasons it may be necessary in the training program to make use of only parts of standard texts, to adapt other material, and often to "start from scratch" and write the material which is needed.

Bibliographies. In many training programs employees are given an opportunity to acquire information about their field of activity from a variety of written materials rather than from a single text. In some cases employees are merely given a list of references which they may read voluntarily as a means of supplementing their knowledge. In other cases employees are

required to read a group of assigned materials. Unless there is careful study in advance of the suitability of the material to the purpose, there is a danger that the bibliography will include much that is supplementary and little that is essential.

Glossaries. Some government agencies whose activities extend into scientific and technical fields face the necessity of familiarizing employees with unusual or difficult terminology. Usually the technical terms are explained in training material or are defined orally by the supervisor or instructor. To assure completeness and to facilitate reference, however, it may be desirable to compile a glossary of the words and terms which cause difficulty. Such a list may not only include a definition of the term but also show how words are pronounced and divided. Two federal agencies even illustrate the shorthand characters for their technical terms which appear most frequently and have incorporated the lists in their manuals of stenographic procedure and style. Another glossary of this type is one entitled "Medical Stenography and Terminology" which is used by some of New York City's employees.

Correspondence course material. The correspondence course as a training method is discussed in Chapter V. Materials which are used in such courses require even more thorough advance planning and preparation than materials used in training programs given at the main office of the agency. The employee who takes the course will probably have available no person who is qualified to answer questions he may wish to raise. As far as possible, his questions must be anticipated and taken care of in the material. The fact that correspondence course material is not supplemented by lectures and conferences should be a strong incentive to preparing it in such form that it will be definitely related to the employee's needs and interests.

Employee handbooks. The typical employee handbook is useful both for text and reference purposes in the induction of new employees. It usually contains a brief, simplified explanation of the structure and functions of the agency and a condensed discussion of the more important rules and privileges of employment. (See Reference No. 36.) The latter type of information is

of particular importance because most employees have difficulty understanding the extensive and complex rules governing such subjects as classification, promotion, leave, accident compensation, travel, and retirement. Ideally, employee handbooks are written so simply and clearly that they are understood by employees of all types.

Problems and cases. Specific work problems and case studies are convenient and effective materials for use in training employees either on the job or off the job. The most useful problems are those which are taken from or are closely related to the work experience of the agency and which pertain to the employee's duties. After the basic facts surrounding the case have been related, the problem to be solved is stated concretely in the form of questions to be answered or an assignment to be completed. Sometimes the way in which the problem was actually solved is explained, and the employee is asked to suggest ways of improving upon the solution.

This case-study approach has proved very useful in training for improved letter writing. Employees are given a set of facts and a letter which was written to explain those facts. They are then required to analyze the strong and weak points of the letter and to write an improved version.

Tests. Tests are used in training programs principally as a means of showing the employee and the trainer how much progress has been made and what weak spots in the employee's knowledge need to be remedied by further training. A pre-test may be used at the start of the training to ascertain the extent of the employee's knowledge. Other tests may be given at intervals during the training to check progress and to spot specific needs. Final evaluation of progress may be made through a mastery or achievement test given at the conclusion of the training. It is sometimes possible to make the pre-test and the mastery test alternate forms of the same test; then the amount of progress is very clearly indicated by a comparison of scores.

In addition to showing what the employee knows or what he can do, tests can be used as class recitation or group discussion material to stimulate interest in essential points in the subject

matter. One agency gives groups of employees a brief true-false test on the functions of the agency. The members of the group then discuss each of the test items in some detail, bringing out why it is true or false and suggesting important related facts. They keep their test papers, marking them and taking notes as the discussion progresses.

Questions and answers. Question-and-answer training material is halfway between tests and texts. It is useful as a variation from other types of reading material and as a means of focusing attention on essential facts. This material may be presented in two ways: (1) with the questions on one page and the answers on another, and (2) with the correct answer immediately following each question. The former is probably more effective for training purposes and usually arouses more interest. If the employee tries to answer the questions before turning to the answers, the weak spots in his knowledge will be brought to his attention.

Scripts. The guiding considerations for the preparation of all types of training material are also applicable to the writing of scripts for: (1) simulated situations, (2) motion pictures, (3) sound slide films, and (4) records and transcriptions. All these methods are discussed in Chapter V.

Visual aids. Charts, diagrams, maps, pictures, and blueprints are training materials which help in forming clear, vivid, and accurate concepts. For both teaching purposes and reference purposes they are effective in "getting across" a condensed message. Visual aids are regarded, however, as supplements to, rather than substitutes for written training materials, oral explanations, and demonstrations. Because of their lack of explanatory detail they are not used alone when a thorough job of training is to be done.

The various phases of the subject of employee training cannot be discussed as though they were separated by airtight partitions. Many of the processes which are described separately actually take place concurrently. Ascertaining the needs for a unit of training, determining where and by whom the training is to be done, selecting the content, developing it for presentation, and planning the methods are all closely interconnected.

This chapter has been primarily concerned with the selection and preparation of the subject matter for training—of subject matter that will be suited to the objectives of the training, to the needs, abilities, and interests of the employees being trained, and to the training methods to be used.

Chapter V

Training Methods

How may employees in the public service be assisted in gaining effectiveness in their present or future work? It has been pointed out that *training* is merely the term applied to the orderly assistance provided for this purpose. The "how" of this assistance is the method.

There are many and diverse training methods. They must be selected to meet particular and specific situations. Although the criteria of selection are difficult to isolate and define, basically the choice of any given method depends upon its relationship to the learning process. The method which best facilitates that process in a particular situation is the method to be chosen.

The importance of choosing the most desirable methods for the training program cannot be overemphasized. The selection of method is the point at which the relationship of content and need are defined and organized for presentation. The training officer, the supervisor, and the employee have an interest in this selection, for careful selection of method is essential to well-conceived training.

The principles of education have much to offer as a guide in the choice of methods for employee training. The basic principles of education have been variously worded and described. One series of definitions (*See Reference No. 38, p. 45*) is presented here to emphasize the point that people learn more easily under some conditions (the application of some methods) than under others.

1. *Education is different for each individual since education is the composite of all the different experiences of an individual.* This principle of individual differences indicates that no specialized phase of learning can function well in an isolated manner. An accountant, for illustration, has an education to which all of

his experiences contribute. He does not have one education to provide him with skill, another to provide him with citizenship, and so on. Methods chosen must be adapted, therefore, to individual need and should be selected on the basis of an understanding of the way in which all experience is related to the educative process.

2. *Education is a continuous process and cannot be confined within fixed and arbitrary divisions.* Since education is continuous and unified for each individual, it demands that confused, unrelated situations be replaced by a planned, well-balanced, and adequately coordinated series of experiences. Methods chosen should contribute to this continuity and coordination.

3. *Educational activities should be based upon the problems, needs, and interests of those for whom they are planned.* Individuals learn more readily when the learning is related to a conscious need or interest. This psychological fact has long been recognized and considered as an important factor in the educative process. Methods should be reviewed constantly to determine whether the one selected is the most effective in this respect.

4. *The democratic method by which the educational program can be related to the real interests and real needs of people is an effective method in education.* The democratic method is based upon the fundamental belief that people, if free and informed, will more frequently than not do what is best for themselves and their group. If this principle is accepted, it follows that trainees should participate, where possible, in choosing subject matter and method.

5. *An educational program must be flexible.* The logic of these principles indicates that the methods, the staff, and the equipment of training and education must be sensitive to individual needs and adaptable to individual variation.

Although these principles have been stated in terms of the individual employee, they apply with equal validity to the individual organization. A training program must rise from the needs of the organization itself and therefore may vary greatly

in content and method from the training program of other organizations.¹

The leading criteria for selection of training methods, then, are the ways in which they conform to sound principles of the educative process, as related to the employee and to the department or organization. There are lesser criteria which are comparative and not static. Cost as measured by result is one of these; another is time against need; and a third is present efficiency and economy in terms of future and continuous efficiency. Another series of criteria is based on the form of organization structure and the nature of work involved. These include the need for flexible or specialized personnel; the number of dead-end positions; and the connection between administrative and technical functions.

The choice of methods should be subject to continuous review, and changes should be made as the situation is modified. If an agency's personnel needs and structural requirements change with program development, the conditions and requirements of training likewise change. At time of personnel expansion, for example, the need is typically for specialists. Lines of promotion may be narrow but rapid. During periods of stability or reduction, on the other hand, greater versatility of staff and wider channels of selection for transfer and promotion increase in importance.

It suffices that each organization must adapt its methods to its needs. The recent attention devoted to the training function as an integral part of a career system in public service has given rise, however, to some trends in the use of training methods that should be noted. One of these trends is the recognition that supervisors should be made responsible for planned employee training as an economical and efficient technique of management. A second trend, which flows from the first, is the appreciation that training encompasses not only instruction on a present assignment, but may also include such far-reaching arrangements as transfers from one position to another, not only within

¹ This does not imply that similar or even identical needs may not be found in different organizations. The choice of method should be based, however, on the need, and not on the success of a method in another organization.

one agency but between agencies. A third trend is the growth of training programs, variously called assistantships, internships, and apprenticeships, which involve special arrangements of recruitment, classification, placement, and promotion. These trends, which are defining methods of in-service growth, give promise that the public service may develop attractive and honorable conditions of employment, based on professional competence and standing.

In the pages which follow, an attempt has been made to describe each method in broad outline; to indicate, without guarantee, certain situations in which the method may be useful; and to suggest possible advantages or disadvantages which are inherent in the method described. Such a discussion may be helpful in arriving at choice of method, although it must be re-emphasized that the choice can be made only in terms of the particular, unique situation in which the method is to be used.

Any grouping of training methods has pitfalls. The classification here used is by no means perfect; the major groupings are not wholly exclusive. Grouping the methods according to certain general characteristics, however, provides some clarity which would be lost in disconnected listing. Accordingly, the methods have been grouped as follows:

Group Instruction Off the Job

Course Work

Lectures

Inspection Tours

Field Trips

Demonstrations

Simulated Situations

Laboratory

Conferences

Discussions

Institutes and Short Courses

Seminars

Individual Instruction Off the Job

Correspondence Courses

Supervised Reading and Research

Reading Clubs

Formal Plans Involving Special Recruitment and Promotion

Apprenticeship in the Skilled Trades

Apprenticeship in the Professions

Internships

Alternating Employment and Study

Individual Instruction On the Job

Supervised Practice

Rotation of Assignments

Devices

Library Service

Visual and Auditory Aids

Manuals

Circulation of Correspondence and Special Documents

Publications

Membership in Professional Societies

The general characteristics of each classification are described at the beginning of the section dealing with that group of methods. The fifth classification "Devices" is composed not of methods as such, but of training aids which may be used to increase the effectiveness of special methods.

GROUP INSTRUCTION OFF THE JOB

Methods falling into this classification have the characteristic of dealing with groups of learners interested in the same subject and studying it together. In addition, these methods require that the participants be relieved of their duties during working hours, or that they be brought together outside working hours. The teaching situation is removed from the immediate duties of the job and care must be taken lest these methods lose their relation to present or possible future job duties.

Group instruction off the job is almost universally used wherever training programs exist. It is difficult to adapt these methods to individual need, but group instruction has values other than the teaching of facts or ideas. Examples of these by-products are (1) the securing of group reaction to a proposal or set of ideas, (2) the stimulation of group effort toward a common goal, (3) obtaining coordination through exchange of information, and (4) exchange of information and ideas based upon the experience of group members.

Group instruction may involve some loss to the individual. Every participant has to adapt his needs and interests to the needs and interests of the group. At its best, however, group instruction utilizes the interactions of individuals on one another to stimulate thought and widen group horizons.

Course Work

Course work is a formal method for group instruction. Its characteristics are well known, since it is the customary method of academic instruction. It is ordinarily a related series of instruction progressing chronologically or with increasing difficulty, starting with a definite beginning and reaching a definite end. Participation in course work is often restricted to persons who are able to satisfy prerequisites, so that the background of participants may be similar.

Courses are usually composed of lectures and lecture-discussions, combined with outside reading, although this may be varied by student reports and recitations, laboratory exercises, demonstrations, or inspection tours. At times, simulated situations such as moot courts and special problem-solving periods are used to relate the course work to actual situations. Quizzes and examinations are usually given to evaluate progress.

The course method is best adapted to imparting knowledge which is complex and which can be organized into definite bodies of subject matter. It is useful when drill is needed and where the working out of problems and exercises is necessary to help the learner master the subject matter. Most frequently courses are given after working hours. By varying the length, the course method can be adapted to subject matter of varying difficulty.

Courses are most successful when taught by competent instructors who are thoroughly acquainted with their subject matter and who know something of the speed at which the material can be assimilated by the group, when there is not too wide a range of ability represented, and finally when the students are definitely interested in mastering the subject matter. The success of courses can be increased if dependence

on lectures is reduced. Through assigning readings before class meetings, and utilizing the period to explore questions raised by students, the class leader can effectively meet the needs of his group. Possibly the most fruitful classroom hours are those in which the leader and the class develop what are virtually conferences on the subject at hand.

Course work requires considerable organizational effort before teaching actually begins, but relatively little supervision thereafter. Its chief disadvantages lie in its relative inflexibility and the constant danger of its becoming unrelated to the needs it was designed to satisfy.

Lectures

Lectures in a sense are "packaged" education. They are usually planned to be complete as units either by themselves or in a series. Usually it is expected that the information presented can be absorbed by the audience without special preparation. Since lecture audiences tend to be more heterogeneous than course enrollees, lecturers are often forced to present generalizations rather than details.

Lectures have much to recommend them. They are useful to stimulate enthusiasm, to provide opportunity for contacts with experts, and to present introduction to new fields. Their difficulties arise from the limitations on the span of attention and memory. Too often auditors are able to remember little of what they heard. Few persons can follow an hour-long lecture step by step to its conclusion. These difficulties may be reduced by the use of supplementary devices. Many lecturers have found the use of slides and films helpful in focusing audience attention. Mimeographed outlines and suggested readings are also means of increasing the effectiveness of lectures. Discussion should be encouraged.

Lectures should be planned carefully. At times, the only planning done is choosing a "big name" to attract a crowd. Ideally, the group before whom the lectures are to be given should participate in the selection of lecturers and subjects. Lecturers should be clearly told the nature and specific interests of the

audience to be addressed. Too often the lecturer is given a general assignment and left to his own devices, with a question period to repair the inevitable deficiencies. Lecturers who are to appear in a series should agree on the scope of each lecture and should relate each contribution to the whole.

In spite of all difficulties, the lecture is a universal group method because of its flexibility and ease of administration.

Inspection Tours

Inspection tours are organized visits to activities outside the agency. An example is a group of engineers concerned with construction visiting another construction project to observe methods in use there.

Tours of inspection are usually connected with other methods such as course work or lecture series. As such, they are useful in relating theory to practice.

Inspectional tours are effective under these conditions:

1. When the group has been informed of what to look for in the machinery or process being inspected.
2. When persons are available to explain what is seen and to answer questions concerning details.
3. When the machinery or process being inspected is a distinctly good (or possibly distinctly bad) example of the subject matter studied more intensively in the classroom or dealt with in a conference and is closely related to that subject matter.
4. When "flow" charts have been prepared to assist the group in relating the various elements of the plant, process, or office to its ultimate purpose.

The disadvantage of inspection tours are two: (1) the loss of time in transportation, and (2) the difficulty of arranging the tour so that its educational value is fully realized. Its scope is sometimes limited, since inspection tours often cannot be made to distant points of operation.

Field Trips

Field trips have much the same characteristics as inspection tours, with the difference that field trips are thought of as visits

within the organization to its field operations or offices. Such field trips may be made by one individual, but their training effect is enhanced if a small group can take the trip together in the company of someone familiar with field operations and problems. This arrangement provides opportunity for discussion and analysis during travel between field points, and allows the more experienced leader to suggest the relative importance of things seen or to be seen.

Successful training through field trips requires adequate planning and organization. The following steps should be taken:

1. Adequate preparation of participants through discussion and reading of material relating to field operations.
2. Preparation and distribution of charts, diagrams, and maps necessary to a clear understanding of procedures and relationships.
3. Advance notice to field personnel, so that the visit at each location may be planned effectively.
4. Requirement of reports of participants upon their return. These reports should be based on observations made on the trip.

The expense of field trips has been the chief objection to their extended use for training purposes. Their value in broadening conceptions of the organization's work, in acquainting central office personnel at first hand with field problems, and in improving, as a consequence, the relationships between the field and the central office, is obvious. This is particularly true for administrative and planning officers located in the central office; isolation cuts them off from what should be one of the chief factors in their thinking—the field application of policy and procedure. A more widespread use of field trips might assist in solving the continuing problem of coordination among various offices of the same agency.

Demonstrations

A demonstration occurs when the instructor performs an operation before a learner or group of learners. Demonstrations are essential in instruction in manual skills and are particularly helpful in the explanation of processes or mechanical devices.

They can often clarify procedures or routines which cannot be adequately explained in other ways. An example of this might be in life saving routines for resuscitation from drowning or in the proper use of the "life net." Demonstrations are valuable also for training employees with limited academic backgrounds who respond more readily to exhibitions of a process than they do to verbal or written explanations. As with other methods of training, the purpose of demonstrations must be clear and the details of the demonstration must be slowly and clearly indicated so that each step of the process is understood. In some cases, the demonstration should be followed by a period in which the trainees attempt to execute for themselves the demonstration procedure. When the subject matter is adaptable, this method is highly useful. It is inexpensive and effective.

Simulated Situations

The simulated situation is in effect play-acting. The participants imagine themselves as placed in an actual situation and then operate as though the imaginary situation were real. The war games of the Army and Navy are the most complicated examples. Moot courts or mock courts are familiar and have been used in training law enforcement officers in presenting testimony. The instructor establishes the situation and then comments on the actions taken.

The simulated situation can be used effectively for training where (1) the function is affected by the interrelations of several persons and (2) where the actual situation is too important, too rare, or too dangerous for use as training. Testimony in court is never a set speech. The witness is affected by counsel for both sides, by the judge, and by court procedure. It would be impossible in court itself to provide training in presenting testimony. The action is too important, even were there no other reasons. A moot court is the answer. It can be organized at will, and because the instructor can supply a running criticism of the execution of the function, it has considerable training value.

The method may be used in less complicated fashion than the

examples given imply. Students in personnel administration can, for instance, interview each other as applicants and employers, hold grievance hearings, or give selection tests, even though the artificiality of these situations weakens their value. The use of the fire tower for scaling operations, rescue work, or jumping is another example. In a number of cities, fireman training centers around the fire tower.

The simulated situation provides a means of learning by performing. It tends to bridge the gap between knowledge and its application and provides for critical review of the action as it is performed. The review supplies individual instruction at the points where the participant is deficient.

Laboratory

A laboratory is a collection of apparatus useful and necessary to the research investigation of a special field of knowledge. The use of a laboratory is indispensable for the conduct of certain kinds of training activities. Expansion of government activities has brought about increased use of specialized research, for which trained employees may not be available. To train them, it is necessary that the laboratory be used as a device and a method. Only through the actual conduct of investigation can the necessary training be obtained.

The laboratory is an effective method. It can be made available to relatively few employees, however, and the cost of creating a laboratory purely for training purposes would probably be prohibitive in any situation. Agencies which maintain laboratories may arrange for these to be used out of working hours for training. Other agencies use the laboratories of educational institutions.

Conferences

A conference is a group meeting designed to explore a common subject or determine a common course of action. It may range in members from the small staff meeting to the meetings of national associations which require the largest of auditoriums. The fundamental similarity lies in the attempt of the confer-

ence to synthesize the contributions of diverse minds into common understandings or agreements.

There is no need here to discuss the many types of conferences, or the purposes for which this method of group thinking is used. Writers on the subject vary greatly in their classifications. Walser, for example, in *The Art of Conference* (Reference No. 52, pp. 40-41), uses three classifications based on the degree of conflict the conferences represent. Tead, in *The Art of Leadership* (Reference No. 42, pp. 186-87), classifies conferences by their purposes, and indicates seven classifications. In a confidential report to the Social Science Research Council, F. Stuart Chapin isolated forty possible purposes of conferences, and then classified these under four major heads.

Although there is disagreement on the classification of conferences, there is widespread agreement on the value of conferences, both for administrative and training purposes. It is in conferences that the interchange of information and experience finds its easiest channel. It is in conferences that group enthusiasm may be engendered, and group unity fostered and maintained. It is in conference that the prejudices of the single point of view can be dissolved in the solvent of discussion from varied points of view.

For this report conferences may be classified into two groups—administrative and training. Administrative conferences are those required by the exigencies of the job itself to plan courses of action or to iron out difficulties. Training is incidental to these objectives. In training conferences, training becomes the primary objective. The administrative conference tends to be concerned with specific problems and their solutions. The training conference tends to be concerned with exploration or definitions of principles using specific problems and solutions as illustrations.

Only a word is necessary here on administrative conferences. The training provided is necessarily incidental to the main objective, but, nevertheless, its value may be considerable. The incidental training obtained from administrative conferences may be the only feasible training for groups which hesitate to

enter activities carrying the label of "training." An awareness of these incidental benefits should be created, and attempts should be stimulated to capture these incidental benefits as much as possible. The training officer can do this by assisting in providing training in conference leadership and conference techniques, and by spreading participation in administrative conferences to potentially able employees who could be admitted as observers of the conference process. By this means, such employees can be brought to an understanding of the major problems of the organization and the methods adopted for their solution. Rotation of the chairmanship has beneficial results in the development of conference leaders. These techniques may serve to increase the training value of the administrative conference without diverting it from its main purpose.

The use of conferences for strictly training purposes has had considerable vogue. It is not necessary here to indicate the techniques of training conferences, since this subject has been adequately dealt with elsewhere (for example see Reference No. 5). But the advantages of the method are matched by its disadvantages, and a careful course must be steered to obtain the first and avoid the second. Most of the criticisms of conferences as a training method arise from experiences with aimless, confused sessions which reached no objective and provided little light while doing so. Because training conferences are fluid, dependent upon the contributions made by participants, considerable planning is necessary. The subject must be determined and defined, the probable steps in progressive thought isolated, and in some instances the probable conclusions forecast. Competent leaders must be obtained, for the training conference depends on its leadership possibly more than do most training methods.²

The conference is particularly valuable as a training method for supervisory employees whose experience often may with great profit be pooled. This method has been used widely, for example, in foremanship training. Since it depends upon the

²For suggestions on conference leadership, see Reference No. 16; Reference No. 25, pp. 82-86; Reference No. 42, pp. 187-97; and Reference No. 52.

knowledge and experience of participants for its text book the conference should be avoided whenever it would be what someone has called "a mutual exchange of ignorance." The variations of its use are without end. Significant developments have appeared in the "determinate discussion" described by R. O. Beckman (Reference No. 5) and in the administrative conferences adapted by the United States Civil Service Commission from methods developed by certain private industries. (See Reference No. 30, pp. 44-58.)

Discussions

The term "discussion" is usually used to describe the exchange of information or ideas among a group. Conferences are discussions directed to specific ends. Discussions are ordinarily conducted by an instructor or group leader. They may be developed, however, among members of a group without designating a leader—as in the case of some seminars. Discussions are useful for dealing with topics in the social sciences (theoretical or applied), in the humanities, and in those aspects of the biological or physical sciences which involve interpretation or evaluation.

Discussions are sometimes criticized for seeming inconsequential. Such a failure may result from (1) poor selection of a topic, (2) poor selection of the audience to fit the topic, (3) domination of the discussion by one or two persons, (4) inability of the chairman to guide the discussion to profitable conclusions, or (5) inability of the leader or members to contribute sufficient substance.

There are various ways in which discussions can be organized. Typical ones are described below: (1) lecture-discussions, (2) forums, (3) panel discussions, (4) symposiums, (5) debates.

Lecture-discussions. Most lectures provide some opportunity for discussion. Almost all should. Discussion can be encouraged by announcing before the lecture that discussion at the conclusion will be encouraged and that a definite time will be allotted to it.

Forums. Forums are group meetings in which the emphasis

lies on wide audience participation in the discussion of controversial subjects. The discussion is the focal point; the success of the forum may be measured largely by the vigor, penetration, and extent of the discussion. Freedom of speech and free flow of ideas and reactions must characterize the forum.

Panel discussion. This type of forum is adaptable to groups of varying sizes. The subject for discussion is presented under the guidance of a chairman, by speakers with special knowledge and, usually, diverse opinions. In effect, a panel discussion is a small conference before an audience. Audience participation follows the short presentations by the panel members. Through this method, the areas of agreement and disagreement are defined in part by the speakers, to be developed and explored by audience discussion. At the same time, the expert assistance of the panel members is available to provide factual information to guide the discussion. Care must be taken to fit the contributions together through summary at the close of the meeting.

Symposium. The symposium resembles the panel discussion in that a group of speakers deal with the same subject. The difference lies in the fact that the speakers in a symposium are chosen not primarily because of their differences of opinion, but because of their expertness in different phases of the subject. By combining their presentations of phases, a well-rounded, expert presentation is created. The symposium is particularly helpful in discussions of complex subjects which must be broken down into parts for clear understanding.

Debate. The debate has lost some of its former popularity as a discussion medium, because of its emphasis on victory rather than truth. It is an important method, however, of presenting opposing points of view, and if handled skilfully can elicit considerable discussion. In present use it is customarily composed of two speakers who present their views in set speeches and then attempt to overturn the views of their opponent in rebuttal.

Institutes and Short Courses

Institutes or short courses, ranging in time from several days to several months, are more nearly organizations of the training

process than they are distinct methods. They utilize several methods of training such as lectures, conferences, discussions, demonstrations, reports, inspection trips, and drill. The primary characteristic of institutes and short courses is the intensive treatment of a subject. The most frequent use is for (1) introductory training before assignment to job responsibility, in which the emphasis is laid upon general understanding of the purposes, organization, program, and procedures of the agency, (2) retraining in skills and techniques already learned but in need of refurbishing, and (3) providing information and skill in new developments.

The institute is particularly useful for training field men who are brought to the central office at periodic intervals. Besides the training values obtained from a well-organized selection of subjects, additional values are obtained in increased staff morale, acquaintance with one another, and the unplanned exchange of ideas which results when individuals interested in the same subject get together. In addition, the instructors for institutes are often better than can be secured locally.

Institutes may be organized to utilize one or more outside specialists in a subject who can be brought together for a short period. In some instances these specialists are used as itinerant trainers to function at field locations at which institutes are organized.

The chief disadvantages are the expense of assembling the trainees and the staff, and the fact that the intensity of the training period may not allow for supplementary reading and study while the institute is in progress. To be fully effective, the institute should be followed by continued training growing out of interests and needs discovered by employees and the agency during the period of intensive training.

Seminars

Seminars are study groups in which participants join to investigate and report on the various aspects of a subject. The leader of the group may assist by guiding assignments and offering his special knowledge, but usually the participants them-

selves conduct their investigations independently. As the results of these investigations are reported to the group, opportunity for discussion and criticism is provided.

Seminars are usually devoted to advanced treatment of a subject by students with considerable backgrounds of training and experience in that field. Successful seminars require two elements: (1) a seminar leader who is an able critic and discussion leader, and (2) seminar members who are capable of and interested in independent investigation and who wish the discipline of reporting to a group for its criticism and review. Seminars are no place for novices and persons who are seeking to understand elementary principles; the formal arrangement of course work is better suited to their needs. The seminar is a flexible, adaptable method, particularly suited for furthering the development of specialists. It is limited in its application elsewhere.

INDIVIDUAL INSTRUCTION OFF THE JOB

Methods grouped under "Individual Instruction Off the Job" have been developed and used primarily to provide training for individual employees, rather than groups, at times when these individuals are relieved from duty, or after working hours. These methods characteristically are adaptable to individual need, but the chief point of difference from group methods is that usually the individuals need not assemble with other individuals for study.

Individual instruction has had its most extensive use in the training of field personnel through correspondence courses. It may have a significant place in training, through intensive supervised study, exceptionally able, selected employees who appear to merit careful and planned development of their potentialities.

Correspondence Courses

Correspondence courses are similar to regular course work in that they usually contain a series of instruction "units" organized on a chronological or difficulty progression, with definite

beginning and end. The difference is that instead of bringing the students to the instructor, the instructor's services are sent to the students, through correspondence. Reading material, outlines, and quizzes, with procedural instructions, go to the student. He prepares answers and reports which are returned to the instructor who may grade or comment on the student's work. By means of this procedure of assignment, execution, and review, the difficulty of distance from the source of instruction is partially overcome.

The subject matter of correspondence courses offered by government agencies usually has a very definite relation to the work being performed, giving either specific job information or background information necessary for efficient performance. The majority of courses follow the pattern of similar work offered by commercial correspondence schools, although variations have been developed to meet problems peculiar to certain agencies and special needs of employees. Most agencies developing correspondence courses have found it necessary to maintain members on their training staffs to prepare text materials, send out lessons, receive and grade papers, and return assignments with correct solutions and comments.

A variation from the usual procedure is found in the distribution of correspondence material not to individuals but to groups. There are two distinct methods of group participation. The Immigration and Naturalization Service of the Department of Labor distributes each week to employees of 22 district field offices bulletins which are set up in the manner of regular correspondence courses. (*See Reference No. 15, p. 52.*) Each bulletin bears a definite relation to the others, and the series constitutes a complete course. These bulletins are used as a basis for group discussions in field offices. Employees usually hold a round-table discussion on the day the bulletin is received.

Another form of group correspondence work is found in the review courses in English, shorthand, and typewriting offered to stenographic employees in the Tennessee Valley Authority. Under this plan the material for the review course is distributed through a group leader to individual employees. The group

discussion is based upon the lessons that have been distributed. However, each individual sends his exercises through the group leader to the central training office for correction and comment. Suggestions for improvement are returned by the training office to the employee—again through the group leader—and at the same time suggestions are made to the leader concerning the future program of the group.

A third method of correspondence training is the use of correspondence material in connection with regular classes, either to precede or to provide a follow-up for class instruction. The Division of Crop Estimates in the Bureau of Agricultural Economics of the Department of Agriculture gave its fieldmen correspondence training for six months before it brought them to Washington for an intensive course in statistical methods. (See Reference No. 7, p. 21.)

Most enrollments in correspondence courses are in field offices where direct training is not available. Occasionally, however, employees who have access to lecture or discussion courses are permitted to take correspondence work instead. The Bureau of Internal Revenue allows employees in Washington to take instruction after working hours either through correspondence courses for home study or through class instruction. The Tennessee Valley Authority has offered its correspondence courses in a few instances to employees who are unable to meet regular class sessions.

Various agencies report specific benefits from correspondence training. Recently, for example, the sudden expansion of activities in erosion control and tree planting increased the Forest Service from five thousand to sixty thousand men. Both replacement and expansion created serious administrative problems, which were solved by the promotion of men prepared through correspondence courses. Reports from other agencies are less specific in examples of benefits derived, but they indicate increased efficiency as a result of correspondence training.

Correspondence courses are not entirely satisfactory. Probably the major objections to correspondence courses are that they lack the personalized training possible in discussion courses

and that they are expensive to administer. Probably for these reasons correspondence training is generally limited to training for employees located in isolated offices where it is impossible or impractical to provide training by any other method.

Supervised Reading and Research

Supervised reading constitutes an effective and flexible method of individual instruction off the job.³ Among the purposes of supervised reading are: To enable the employee to orient his special part of the work with respect to the whole; to acquaint him with details about the organization in which he works which will supply a rational basis for existing routines; to supplement deficiencies in his present knowledge; and to introduce him to new and broader aspects of his job. Readings assigned under this method may consist of office manuals and file materials, such as correspondence, bulletins, memoranda, and official documents, as well as books and periodicals.

Reading lists and assignments should be preceded by a brief description and explanation which will serve as an introduction and indicate the purpose of the assignment. The effectiveness of supervised reading is increased by periodic conferences of the employee with a supervisor.

This method has been useful with employees whose previous preparation has been technical or professional, and who have entered government service in responsible positions. Ordinarily such employees have a high degree of intelligence and mental discipline but are not conversant with the peculiar characteristics of public service and the inescapable limitations of large organizations. By means of supervised reading they can assimilate rapidly the information required for adjustment. In decentralized units, such as field offices, supervised reading offers a form of instruction which insures the exposure of all participants to identical information. The most general use of supervised reading and research assignments, however, is as an accompaniment and supplement to lecture series or course work.

³Supervised reading often could also be classified under the heading of Individual Instruction on the Job.

The special advantage of this form of instruction lies in its flexibility and its adaptability to individual differences of employees. With exceptionally able employees, it is sometimes possible to give reading or research assignments which will take the place of more elaborate training; conversely, employees who exhibit weaknesses in certain respects may strengthen themselves through appropriate reading assignments which give special emphasis to those parts of the work in which they are deficient. An obvious disadvantage lies in the danger that, lacking active motivation, the reading will become mechanical and that, without the stimulus which arises from group participation, it will fail to become an actual part of the employee's educational experience.

Reading Clubs

Reading clubs are a special application of the idea of guided reading as a means of individual instruction. They are designed to provide the employee with incentive and facilities for reading in general subjects, such as history, economics, the arts and sciences, which, though not specifically related to the job, are essential to the making of socially intelligent and useful technicians. This plan has been developed more fully for non-vocational reading, the purpose of which is to widen horizons.

A modification of the reading plan developed by the Engineers' Council for Professional Advancement has been used successfully among engineering employees of the Tennessee Valley Authority. The steps in the plan were as follows:

1. A college teacher of engineering gave an introductory lecture discussing trends in engineering education and pointing out the benefits resulting from continuing education in areas not covered by engineering school curricula.
2. Local library catalogs were checked for suitable books, and cooperation of librarians in the plan was obtained.
3. Group meetings of representative engineers from various departments were held for explanation and discussion of the plan.
4. These representative engineers distributed in their de-

partments mimeographed lists of 150 recommended books in order that interested employees might indicate those they desired to read.

5. Those who registered for reading were grouped in clubs of 12 members each. Thereafter, each registrant automatically received a book of his choice once a month for 12 months, returning the volume he had read on receipt of the new book.

The special advantage of this plan lies in its automatic nature; when the participant once has joined the club, initiative passes to the librarian, and a book which he has expressed a desire to read, because it is important for his professional development, comes to his desk once a month. It may be expected that a few registrants will drop out and that those who remain may find certain volumes uninteresting or too difficult. A substantial majority, however, will retain their interest and carry the plan through to completion.

FORMAL PLANS INVOLVING SPECIAL RECRUITMENT AND PROMOTION

The methods described in this section are combinations of training methods rather than individual methods in themselves. The fundamental similarity among them lies in: (1) Special recruitment, since participants are recruited for training or are selected specially from among present employees with recognition given to the selection through change of title; (2) special status as trainees; and (3) special formal plans governing the operation of the method. They are all directed toward developing a reservoir of employees to fill expected vacancies.

Apprenticeship in the Skilled Trades

The extension of governmental activity into construction, housing, utility management, and other fields in which manual skills are used has caused a corresponding extension of apprenticeship. Through the Federal Committee on Apprenticeship of the Department of Labor, the United States Office of Education, and labor unions, national interest in craft apprenticeship is increasing. For agencies needing skilled craftsmen, apprentice-

ship provides a satisfactory method of creating the necessary skills.

Briefly stated, a craft apprenticeship is a program of training under a formal plan leading toward certification of the apprentice as a qualified journeyman. The apprentice is selected for his potentialities and is kept continuously in training while on the job, being rotated and assigned to various journeymen for training, although he works in but one craft. He is expected to work on jobs which have training value and is given training on all jobs to which he is assigned. In addition, he pursues for a minimum of 144 hours per year of apprenticeship, a course of technical related instruction approved for his craft. The major portion of the training is acquired on the job; the other portion of the training is related supplementary instruction aimed to provide theory and background for the craft skill.

Skills are acquired by performing manipulative operations on the job. All training on the job is under the supervision of a journeyman mechanic, who instructs by demonstration and supervised manipulative exercises. Much of the knowledge is acquired by observation. The related supplementary instruction is designed to give the apprentice the reason for and the explanations of various processes on the job.

Definite related technical courses are offered to groups where the information may be presented through supervised study, group discussions, and lectures. Correspondence courses may be used for isolated apprentices. Laboratory courses may be set up where it is possible to acquire certain manipulative skills, but in the main this is discouraged because manipulative skills may be learned more effectively on the job under actual work conditions. An exception to this rule is made in the case of certain operations that are performed infrequently during work hours. There are certain skills that must be acquired through long practice before an apprentice can be allowed to execute these processes on a work job. It is more economical to teach these operations in the classroom or in the laboratory than on the job.

Apprenticeships are organized on definite time periods, with

certain phases of the trade to be mastered in each period. At the end of each period, the apprentice is examined, and if he demonstrates satisfactory progress, he is automatically promoted to the next period. Each period carries a progressively higher percentage of the journeyman's pay rate.

Although the craft apprenticeship may solve the problem of recruitment of craft journeymen, it has problems of its own. Typical are the difficulty of providing job rotation that will offer a well-rounded craft training and at the same time care for immediate job needs; the difficulty of closely relating the class work with the job processes; the difficulty of forecasting job needs so that a proper number of apprentices will be kept in training. These difficulties are not insurmountable, although they suggest that an apprenticeship program cannot be operated without careful attention.

The benefits to be derived are great. Primarily, the benefit of an apprenticeship program lies in the fact that journeymen are provided who not only have learned the craft skill under the most favorable conditions but have at the same time been thoroughly grounded in the objectives, policies, and procedures of the agency. A second major benefit is that a source of craft skill is made available. Finally, the apprenticeship program, if properly organized, can be the core of the relationships developed between labor and management, since both have a fundamental interest in the development of journeymen.

An apprenticeship program in the crafts should not be undertaken unless the agency is able and willing to:

1. Secure the cooperation of organized labor in planning and administering the program.
2. Organize the program under formal, written plans upon which labor, management, and the employment, classification, and training offices agree.
3. Give reasonable assurance to apprentices of continuous employment through the period of apprenticeship. Since apprenticeships in most crafts run from three to five years, it is obvious that apprenticeships should not be undertaken by agencies with a temporary need of skilled craftsmen.

4. Provide that promotion to journeymanhood within the organization shall be made only through the apprentice program.

5. Provide opportunities for job rotation and related technical instruction.

6. Provide for wage increases as the apprentice completes the different time periods.

If these conditions are met, the agency may be fairly sure that the organization of an apprentice program will assist greatly in meeting its needs for craft skills.

Apprenticeships in the crafts have not been used widely in the federal service and, according to information at hand, little if at all in the public service of states, counties, and municipalities. Private industry has made extensive use of this training method, however, and it may be expected that its use in government service will increase as the need for craft skill expands. Craft apprenticeships have been conducted in the Navy Yard, the Government Printing Office, the Bureau of Printing and Engraving, and the Tennessee Valley Authority.

Apprenticeship in the Professions

The plan of apprenticeship has been adapted from the crafts for use in professional training. An apprenticeship in professional or administrative work is a position created for a certain period for purposes of training, with the definite intention that the apprentice shall be permanently employed at the conclusion of training. It usually implies a definite appointment and payroll status. The training may utilize job rotation, class work, and supervised reading to reach its objectives. Another term should be adopted, such as "assistantship" since "apprenticeship" should probably be restricted to craft training.⁴

Two approaches to training assistants in the professions may be distinguished. The assistants may be given highly specialized training in preparation for a career along technical lines, or

⁴The term "assistantship" was suggested in *Training for the Public Service: the Report and Recommendations of a Conference Sponsored by Public Administration Clearing House* (Public Administration Service, Chicago, 1935) and *Proceedings of the Advisory Conference on Public Service Training* (United States Office of Education, Washington, 1939).

they may be provided with opportunities for a broad experience in more than one specialty. The latter approach seems especially appropriate for assistants who are being trained in managerial services; namely, budgeting, purchasing, financial administration, personnel management, and so on. In addition, there is some evidence that broad background training by planned initial work experience, such as an assistantship plan, may be useful in agencies where a combination of specialties is required. The need for personnel which commands such a combination probably arises more frequently than is commonly recognized.

The value of the assistantship depends somewhat upon the nature of the permanent position to which the assistant is ultimately appointed. Even if the position is somewhat specialized, however, the agency may benefit from the assistant's active understanding of the relationships between his specialty and other phases of the program. Moreover, shifts in program and load may alter personnel demands to a considerable degree, and an agency is fortunate if it has developed versatile employees on whom it can draw. The advantages of this versatility are increased if the assistant, in the future, progresses to an advanced administrative position. For this, as well as other reasons, the assistantship is a training method especially appropriate to a well-developed career system.

There are certain disadvantages in the assistantship scheme. The cost is considerable. It is difficult to forecast future employment needs with accuracy so that assistants completing their training will find appropriate places within the agency. A constant danger of either oversupply or undersupply exists. It is difficult to select assistants because the prediction of future performance is extended to the point of prophecy. A special difficulty exists in the danger that assistants may come to regard themselves or to be regarded as a special group, objects of special advantages. Finally, the agency may lose its assistants to other agencies after training is completed. It would be impractical to indenture assistants for a period of employment after training, although the University of Wisconsin practice, whereby the University's loan to an assistant (apprentice) be-

comes payable immediately if he leaves the state service within two years, has some effect of indenture. The solution may be for the agency to recognize its training obligation as an obligation to public service as a whole.

Significant assistantship programs have been or are being conducted by the State of Wisconsin in cooperation with the University of Wisconsin (See Reference No. 50), the Bureau of Public Roads, the Bureau of Indian Affairs in cooperation with the National Institute of Public Affairs, the Tennessee Valley Authority, and others. A committee of the National Association of Railroad and Utilities Commissioners has recently completed a study of assistantships to determine their feasibility for the railroad and public utility commissions.

Internships

For certain professions a period of introductory training called "internship" has been established. In many cases the intern is supported by a grant or scholarship, and employment in a public agency occurs only after the internship is completed. Internships are actually continuations of the academic educational process, usually at the graduate level, often without regular appointment or a payroll status in the agency. In some instances internships are held after the completion of residence at an academic institution; in others, they are held in between periods of residence in academic life. The internships which follow work at the University of Minnesota are of the former type; those at Harvard are of the latter.

The internship is a method for bridging the gap which exists between formal education and entrance into the profession. The internship as well as the assistantship may be directed either towards a rather specialized field or towards a broad work experience program to supplement or emphasize formal academic training of an equally broad character. The chief distinction is that the agency employing apprentices is typically attempting to provide itself with trained personnel; while the agency cooperating on an internship is making itself available as a continuation or supplement of academic instruction.

Three brief suggestions may be made: (1) the aims of internships should be carefully considered, (2) positive effort should be made to divorce internships from research activities in favor of providing interns with work experience of a more day-to-day type, and (3) the internship should be governed by a formal, written plan, which has been agreed upon by the cooperating agency and the academic institution. These suggestions may be heeded effectively where careful attention is given to goals.

Alternating Employment and Study

This method is exemplified by the "cooperative" plan of education which exists in a number of colleges. Periods of work and of study are alternated for periods of time which extend typically from six weeks to three months. Students in pairs usually alternate on one job, one student being at school while the other covers the job. The plan is usually limited to students who have successfully completed the first year of a five-year college course. Colleges and universities often have personnel coordinators who assist in the rotating process and give the cooperating employing agency assurance that the job will be filled by a qualified student in case shifts are necessary. Rotation of job assignments within the agency and increased salary in regular, defined steps are usually part of the plan.

The application of this plan is limited by available fields of work and study in which colleges and universities are able to supply employees. Distance from such educational institutions, of course, offers a limitation. Otherwise, the plan can be used for any work which can advantageously be done by college students.

The method is useful as a long-range recruitment device. Young college students are introduced to the work of the agency early in their careers, and are developed by two to four years of rotating assignments of work. The rotation of work assignments serves as a vocational "try-out" for the student and as a probationary period to the agency.

The disadvantages are reasonably obvious: (1) necessity for "breaking-in" students to new work assignments at periodic

intervals, (2) added burden of personnel administration in executing the status changes for the rotating group of employees, (3) possibility of losing the good students before or after graduation to other employers and the consequent loss of the training investment. In spite of its disadvantages this method is a satisfactory means of obtaining competent personnel from universities and colleges.

INDIVIDUAL INSTRUCTION ON THE JOB

It has been emphasized in this report that training is an organized effort to increase the effectiveness of employees in the work of an organization, and that training is a major responsibility of management and supervision. Every supervisor is responsible for the efficiency of his unit and of the individual employees of which it is comprised. In the broadest sense, almost every relationship between supervisor and employee is educational; employees are constantly learning from their superiors and associates, on the one hand, and supervisors are constantly concerned with the evaluation of work, on the other hand. Furthermore, it is a sound principle of education that learning while doing is the most natural and the most efficient method of instruction.

Training does not include all supervision; it is true, however, that individual instruction by the supervisor is the simplest, and at the same time, the most natural point of learning for the employee. The supervisor, in most cases, is the best qualified to give instruction in the skills required. To be considered as training for the purposes of this report, however, the educational relationship between supervisor and employee must be defined and planned in an orderly fashion. In addition to methods described elsewhere in this report, *supervised practice* and *rotation of assignments* designate two methods by which employees may be trained for more effective work, present and future, in the organization.

Supervised Practice

Supervised practice may be defined as that process by which the individual employee receives instruction on the job for

special and defined purposes. This term is usually not applied to the training of individuals assigned to a unit or supervisor for temporary periods—as in the case of assistants, apprentices, interns, or others rotated on the job. It is, rather, instruction consciously devised to assist the new employee to learn his job, or to assist the experienced employee to do his present work more effectively or to prepare him for advancement in the direct line of promotion.

Some specialized jobs can be learned in no other way than by systematized supervision on the job with periodic check-ups on performance and progress. Phases of government accounting, for example, are learned on the job. This does not mean that other methods of training might not supplement supervised practice. Several types of public work involve small, scattered staffs with very technical work. The Weather Bureau cares for its training problem under these conditions by providing informally at each station supervised work study both during and after working hours.

In theory there is but slight difference between individual training and staff supervision. Many supervisors and administrative officers, however, are not selected for knowledge of teaching technique, are often not trained in the techniques of all the work which they direct, and are often concerned with other problems. They are not, therefore, in a position to discharge effectively this portion of their responsibility. Several agencies have met this problem by assigning special training officers to work with selected employees, or, reversing this technique, they assign employees to supervisors who are able to guide the learning program. The Tennessee Valley Authority has assigned an instructor in the use of explosives to work with employees, at their jobs in crews scattered about the Valley, in order to develop safer and more economical methods of blasting. Agents of the Federal Bureau of Investigation are often assigned to work with more experienced special agents in the field so that the veteran agent may make suggestions for the improvement of investigation techniques.

The so-called understudy method is perhaps the most familiar type of supervised practice. This method is advocated chiefly

for the administrative classes, the objective being that for each executive officer, for example, there should be another person in training for possible future promotion to his position. This involves promotion in a straight line, and it involves also the selection of employees on the basis of promotional promise and opportunity as well as for the immediately described position.

Rotation of Assignments

The practice of assigning an individual employee from one type of work to another, usually related, has been proved sound by the experience of the crafts and the trades as expressed in their systems of apprenticeship. It has been applied with nearly equal success, in more recent years, to professional and administrative training as described above (p. 88) and has been organized for assistants, interns, cooperative students, and other special groups. This method of training is by no means limited to these younger and selected employees who are learning the rudiments of their specialty or who are bridging the gap between their academic experience and its application under practical conditions. Rotation of assignments is used effectively also for general purposes of orientation—both for new and old employees—and for the specific purpose of increasing or broadening vocational knowledge in related fields.

The term *rotation of assignments* usually applies to a period of exchange long enough to assure (1) a greater degree of mastery of some new phase or skill involved in the same organization, (2) the elements of a similar job in a different geographical area, or (3) the variations of similar work as applied by different organizations. The Department of Agriculture believes that temporary exchanges of executives should be arranged between the department and municipal and state agencies. Plans are now being developed to exchange a bureau financial officer with a financial officer of the Los Angeles city government. Administrators and potential administrators, for promotion purposes, must have a specific knowledge of problems in their future units. Members of this group in the Forest Service are given assignment in range management, timber sales, fire con-

trol, etc. Station chiefs of the Food and Drug Administration are given assignments at other stations and in Washington so that they may acquire a well-rounded knowledge of problems of the administration in all parts of the country. Certain of the employees of the United States Civil Service Commission, from time to time, are given an opportunity to secure specialized training in all of the major divisions of that office so that they may renew their familiarity with the progress of the Commission's work.

Lest one consider that job rotation be looked upon as a result and not a method, it should be noted that the stability of many of our public services depends not alone upon the source of trained personnel, but also upon the flexibility of their staffs. Competence in the several techniques of related positions is, these days, even more important than overspecialized ability in a narrow channel or in a narrow sphere. The United States Foreign Service has for years detailed officers to foreign countries for intensive training in languages, economics, and other subjects closely related to the foreign service.

Individual instruction on the job is a constructive method of supervision. The extent to which such training is developed, usually related to an immediate function and a specific position, is a measure of the supervisor's competence as well as a criterion for the training program per se. Rotation on the job, adaptable more easily in large than in small organizations, can be used to develop flexibility of staff, to increase facility of coordination and cooperation, and to broaden the base and number of promotional channels and the number of employees qualified for such variety of promotion. Needless to say these training devices must be carefully worked out in terms of analyses of related jobs, slack work periods, and the qualifications and caliber of selected employees. The number of employees involved at any one time in a job rotation program is usually, and properly, small.

DEVICES

The customary use of some educational techniques is to supplement the more distinct methods which have already been

described. The separate classification of this group of devices is not hard and fast. Motion pictures may possibly be considered a method, but their most effective use is as an instructional material, similar to a book or a lesson outline, in conjunction with and as a supplement to a method of training. Many devices could be described. The ones discussed on the following pages appear the most important.

Library Service

In many situations adequate library facilities are indispensable to fully effective employee training. Departmental or special libraries have long been established for provision not only of the printed materials basic to their subject fields, but, in addition, for materials relating to specialized areas within these fields. Library facilities may reasonably be expected also to contribute directly to programs of employee training: (1) By supplying the standard texts, studies, and reports which bear upon training; (2) by preparing bibliographies for persons in charge of training, and reading lists for supervised reading assignments; (3) by procuring, or furnishing the information necessary for procuring, instructional materials; (4) by placing assigned readings on reserve on special shelves; (5) by using bulletin boards and other publicity methods for bringing training opportunities to the attention of employees; and (6) by routing books, periodicals, and other materials to individuals known to be interested.

Since an objective of employee training frequently is to stimulate intellectual curiosity and to develop habits of independent reading and investigation, the departmental library should be represented in training conferences. Such representation will make possible the most effective contribution of the library. The book needs of the training program should be discussed also with the adult education specialists of local municipal and college libraries. These agencies, as well as the libraries of government departments, frequently are called upon by their users to meet demands arising from employee training programs.

The library meets, with peculiar aptness, the orientation

needs of the intellectually mature new employee. It is adapted also to individual reading for general broadening, and equally for intensive study in some particular phase of work. Research assignments, of course, are dependent upon the library. It is the logical point for administration of reading clubs, heretofore described, and it may properly be also the center for handling instructional materials of all sorts, including visual aids.

The very fact that the library contains a considerable accumulation of materials which may be of interest to alert employees is at once its great advantage and disadvantage: the employee who needs intensive reading in a restricted subject area may be tempted to wander afield into irrelevant, even though interesting, paths; while another, whose requirement is for a comprehensive view of a given subject, may bog down in the unaccustomed mass of detail which he finds.

The value of the library as a training device is determined largely by three factors: (1) the extent to which the library staff has a positive participation in the planning and execution of training activities; (2) the library's financial ability to procure adequate supplies of books and other instructional materials; and (3) the flexibility with which its routines may be adapted to the needs of the training program.

This flexibility is the more important as the library is called upon to fill unusual demands, particularly from distant offices. Expense forbids branch libraries, but traveling libraries with small, select collections have been used by the Weather Bureau, and library kits on special subjects are circulated by the Indiana State Department of Public Welfare among its employees. Other ingenious variations on traditional library service have been made in order to increase the effectiveness of this training device.

Visual and Auditory Aids

Visual aids have an important place among special instructional materials for employee training. They may include objects, specimens, and models; still pictures and graphic presentations, such as maps, charts, graphs, blueprints, posters, pic-

tures, lantern slides, and film strips; and motion pictures. The general purpose of all visual aids is to help in forming vivid, accurate, and clear concepts. It should be observed that they are means to ends, not ends in themselves; they are designed to assist and supplement oral instruction rather than to supplant it. Auditory devices, also, though of more recent development and less widely used, cannot be overlooked as instructional materials. Phonograph records, radio programs, radio transcriptions, and recording equipment are applicable to teaching situations in which sound is a factor, as, for example, in groups studying music, public speaking, foreign languages, and the techniques of interviewing.

If visual and auditory aids are to be effective in employee training they must be selected with a view to the precise situations in which they are to be used, for each form has its own special value. Apprentice electricians, for example, will find blueprints of the job on which they are employed more real and vivid than wiring diagrams in a textbook. Specimens, objects, and models on the one hand convey concrete information; while charts and diagrams on the other are more satisfactory for analysis or for explaining abstract ideas. Unprojected pictures and charts may often be used effectively for individual instruction while projected images such as stills, slides, and film strips may be found better for groups. Silent motion pictures have great value for presenting ideas which involve movement or action; while if sound, as well as motion, is an essential part of the ideas to be presented, the sound film is more effective than the silent.

Educational motion pictures are at present the most significant visual materials of instruction.⁵ Among many departments and agencies which use them as training devices, the Army, the Federal Bureau of Investigation, the Census Bureau, and the Forest Service probably use them the most. Films have been found especially valuable for the following purposes:

1. To provide emotional setting and enthusiasm at the beginning of a course.

⁵ John E. Devine's *Use of Films as an Aid in Training Public Employees* (Reference No. 14) is an admirably useful pioneer study which reviews accomplishments and indicates potentialities of this device.

2. To arouse interest and promote individual reading and study.
3. To develop originality and to increase individual participation in class activities.
4. To provoke discussion and to develop individual facility in self-expression in both writing and speaking.
5. To summarize and review a course at its conclusion.

Motion pictures can be substituted to a large extent though not entirely for actual observation when the latter would require distant travel or when, for other reasons, observation is not feasible. Photographic methods such as double exposures, high-speed and time-lapse photography, and animated drawings in some situations, help make motion pictures more effective instruments of learning than the unassisted eye.

Some governmental agencies have used the making of motion picture films as a training device in itself. It often happens that the instructional films available especially for the teaching of such skills as typewriting and filing, for example, are unsuited to employee groups because the films are too elementary in treatment or because they do not conform to certain details of departmental routine. In these circumstances instructors may have the group plan the sequences, write the script, and provide the action for a 16mm. film on the subject of study. These processes of planning, analysis, and performance have marked educational value and the film thus made can be used with excellent effect in the further instruction of the group. It also becomes useful visual material for subsequent classes. Further development of the technique is warranted.

Examples of the uses of phonograph records are found in instruction in music, foreign languages, public speaking, shorthand, dictation, and rhythm records for typewriting practice. Recording devices which can be used by instructor and students in class situations are helpful in measuring progress in the development of proper enunciation, pronunciation, and tonal qualities. The perfecting of means of making electrical transcriptions of radio programs at the point of origin of the program and making these transcriptions available at moderate

cost may hold large possibilities of application to the training of governmental employees, especially those in field locations.

When visual materials are used with due regard for their separate and special characteristics and in close connection with the subjects of instruction they have the great advantage of contributing vividness and clarity to the presentation. While pictures projected before a group help give all its members the same background and starting point for discussion, nevertheless it is necessary to remember that each individual interprets the things he sees in terms of his own experience. Hence, the instructor must watch closely for faulty interpretations arising from inadequate experiences. The use of visual and auditory materials requires careful advance preparation on the part of the leaders to correlate these materials effectively with instruction. Leaders must also be able to select and direct attention to essential points. Visual and auditory materials stimulate mental activity, but not all of the ideas which emerge are relevant and profound. This places on the instructor the difficult and responsible task of helping the group to attain accuracy and to separate the significant from the trivial. In brief it may be said that the factors which give visual and auditory aids their greatest value make them the more difficult to use wisely and subject them more often to abuse at the hands of inexperienced instructors.

Manuals

The term "manual" designates the volume in which are stated the policy and procedures governing the work of an agency or its units. When used for training purposes, it becomes a significant type of instructional material. Almost all manuals are constantly being revised to reflect changes in the policy and procedure they describe. The result is that manuals represent, or should represent, the most up-to-date information available. Because they are concerned with information affecting the daily activity of almost every employee, the manual has an immediate application.

The manual may be used in three ways: (1) individual study

for information; (2) group study for information; (3) individual or group study for analysis and comparison. Under the first of these, an employee may individually wish to gain a wide knowledge of his or some other unit. If comprehensive manuals are available, his task becomes one of mastering the information provided. Without such manuals, the difficulty of his task is multiplied many times.

Group study of manuals may be organized under a leader who will lead discussion, assist in clarifying difficult points, and guide the group to the more important policies and procedures. The purpose of the group is to obtain information on and understanding of policy and procedure, not to analyze and evaluate it. At the same time, sufficient understanding of the reasons behind policy and procedure should be supplied.

Study for analysis and comparison may be carried on by individuals or groups using the manual as a case study to be analyzed and compared with those of other agencies. By such a process, differences in policy and procedure may be discovered, and relative merit determined.

Since the value of using manuals as instructional materials is great, the training officer should attempt to stimulate the development of manuals where they have not been prepared. The effort will be well repaid, both through the discipline and analysis required by the preparation of manuals, and the training use to which they can be turned.

Circulation of Correspondence and Special Documents

A simple device to aid in the training of employees is to circulate file copies of correspondence, including interoffice memoranda, and special reports, articles, or speeches prepared by staff members. The simplicity of the device may cause question of its value, but agencies which have used it find definite benefits. Coordination is improved since correspondence often states action taken or to be taken, and the staff is assisted in achieving a common background of information.

Circulation of special documents should be as wide as interest and economy suggest. Where interest is universal, copies should

be printed and distributed. This procedure would be desirable for a new salary policy or a new interpretation of leave regulations, for example. Where interest is less extensive, circulation of typed copies is sufficient. The important point is that circulation be considered whenever a special document is prepared. A research study in one unit may have important meaning in another. Unless effort to circulate documents is made; they may never have their maximum usefulness.

Publications

Public agencies can increase the competence of their staffs through encouraging the publication of professional books, articles, and speeches, since the preparation is in itself valuable training. Moreover, publication increases the supply of material and information available to other agencies. The maintenance of employee morale and interest, as well as intellectual advancement, may depend considerably on publication outlets. This is of vital importance to the research worker, and it may assume almost equal importance for administrators. We may quote Sir Henry Bunbury: "A body which is neither encouraged by its creators to be active, nor allowed to publish the results of any activity which it may generate spontaneously, is likely enough to become inert." (See Reference No. 8, p. 14.)

Training by writing for publication is a feasible and useful technique, requiring little more of the agency than encouragement and sympathy. In addition, training may be secured through publication within the agency. An especially useful type of publication is the house organ. It provides a publication outlet, and at the same time provides a means of making significant information available to large numbers of employees.

Several problems affect house organs. They have a tendency to multiply indefinitely as each unit in a large agency becomes interested in discussing its own technical problems. They often fail to be interesting because of inadequate care in presenting the material. It seems advisable that the house organ contain appropriate news items, plus items designed to bring the staff up to the minute on technical developments. The organ will be

successful only if the material is presented in a lively manner. Due care should be exercised by the administrator to prevent duplication and overlapping.

A special type of internal publication is the "Handbook for New Employees." As a means of assisting in the orientation of newly recruited employees, its value is considerable. Usually it provides information on general purposes, organization, personnel services and regulations, and related matters, and refers to sources of more detailed information.

Membership in Professional Societies

Membership in professional societies may offer various opportunities for training. The agency itself may hold membership in a professional association such as the Civil Service Assembly of the United States and Canada, or individuals may belong to other appropriate professional organizations. The actual training value of such membership may vary but there is little doubt that the membership has considerable benefit for individual employees.

Agency membership will be obtained for training purposes particularly where publication of materials is a part of the service. Individual memberships offer a variety of training possibilities of real importance. Participation in association meetings often provides a stimulation to professional growth. The preparation of reports and papers for professional meetings or of articles for professional journals provides training opportunities for both speaker and audience. In addition, each public agency should make reports on its program available to professional societies with a view to training in other agencies. Such service is implicit in membership and can have real value especially in view of the difficulties of coordination and dissemination of knowledge in a country as large as the United States.

CONCLUSION

The descriptions of methods and devices which this chapter contains are introductory. The infinite variations, adaptations, and combinations to which these methods are susceptible have

been treated only in passing, without any attempt at complete coverage. And yet the effectiveness of training programs rests in good part on the ingenuity and skill with which these adaptations and variations are made. Methods, to repeat, must be selected for specific situations; the specific situation may require modification of the master types described in this chapter, and may require various combinations of the master types in the conduct of a single training activity. A ready-made suit seldom fits perfectly. The trainer must not be content with adopting methods; he must adapt them to the situations and needs with which he deals.

This process of adaptation must be continuous. The adaptation, even the creation, of training methods need never end. In fact, it should never end. The training officer must constantly experiment in the use of method. He must constantly analyze and evaluate the effectiveness of the methods he has chosen, and determine whether other methods, adaptations of known methods, or the creation of new methods will increase that effectiveness. Only by so doing can he make sure that the training program for which he is responsible has not lost its possible effectiveness through the repetition of old methods after the situation and need for which they were designed have long since disappeared.

Chapter VI

Evaluation of Public Service Training

IT is the essence of this report that any public employee training program must justify itself by returning to the government organization either a financial saving or improved service to the public, which can be translated into a dollars and cents saving or increased satisfaction to the individual citizen. These returns may be remote and indirect rather than direct and immediate, but they are nonetheless essential if the training program is to demonstrate its worth to legislators, administrators, supervisors, employees, and the public.

How can the results of training be measured? This is a question which some may wish to postpone for the more mature stages of public employee training when initial questions of organization and technique have been fairly well settled. Evaluation appears to these persons as a remote question to be left for armchair reflection when the pressure of demand for getting the training program under way is somewhat relaxed.

While none could ask that all training activity cease until adequate techniques of evaluation be evolved, it must be said that truly intelligent decisions as to appropriate methods of developing the training program depend in large part on the availability of evaluation techniques which measure adequately results obtained by the use of these methods. Without these techniques for evaluation, decisions are based on assumptions, tested unconsciously against experience, or on "hunches" whose utility usually depends upon the breadth and depth of experience of the man who acts on them. *A priori* assumptions and hunches are legitimate bases for administrative decisions only when something better is lacking. They seldom can be ex-

pressed in terms that will be understood equally by the training technician, by the public administrator who is only a layman in the field of training, and by legislators and the public who are asked to support the training program. The technician must fortify his assumptions and hunches with demonstrations of the effectiveness of training which are equally apparent to all concerned.

PURPOSES OF EVALUATION

Some of the important purposes served by devices for appraising the training program are:

1. Reasonably objective evaluation should provide evidence to serve as the best justification for public expense involved in training. Legislators and citizens are seldom versed in the theory of public administration which accepts training as a *sine qua non* of public personnel management. They respond much more readily to evidence that a given training program has resulted in definite financial savings to the government or in specific improved service to the public than to arbitrary statements of the principle that training is a good thing.

2. Evaluation provides the administrator and the training officer with a basis for deciding the most profitable order in which to undertake training activities. All the training activities required in modern government cannot be initiated and developed simultaneously. Intelligent choices among alternative programs are facilitated by comparisons of the results to be expected from each.

3. The expansion of an organized body of knowledge about training depends on the ability of trainers to test, in terms of experience and results, various methods of organization and the use of given methods to meet a given training problem or need. Knowledge in a technical field consists of those principles and practices which all or most competent observers agree are valid. Agreement among competent observers will be most elusive without some objective means of comparing results.

4. Evaluation leads to continuous improvement of the training program. Weak spots in the program are pointed up and

methods may then be devised to overcome them. Strong points can be further fortified in order to retain their advantages.

5. Evaluation enables the government agency to secure balance in the training program. Underemphasis and overemphasis are brought out when evaluation is undertaken in terms of end results.

6. Because evaluation is meaningless unless related to objectives, it often has the salutary effect of compelling those responsible for training to state objectives more precisely. A more precise statement of objectives would have been the salvation of many an unsuccessful training program and it may lead to an improvement of organization and methods all along the line. It is only fair to say, however, that precision may not in itself facilitate evaluation. Objectives may be precisely stated and yet evaluation may continue to be difficult.

7. The more precise statement of objectives may lead to an appraisal of the objectives themselves. If this appraisal results in a revision and restatement of objectives, it will mean changes in the training program which will make it more closely related to government training needs. Periodic examination of objectives is healthy in any endeavor, and employee training is no exception to this rule.

Public employee training is not yet institutionalized and therefore is relatively free of the "cake of custom" which tends to border around any institution. To keep it free requires more or less continuous evaluation and continuous adaptation of the training program in the light of that which is revealed by evaluation.

IS EVALUATION POSSIBLE?

Although the case for evaluation is clear in terms of the purposes it fulfills, there are those who accept the purposes and say that it can't be done. Apostles of objectivity and of the scientific method will cite the large number of variables that enter into the success or failure of any training program and will promptly scorn the possibility of identifying with certainty any causal relation between a given training program and subsequent

changes in government activity. This argument is a familiar one that must be met by all who seek for the development of a scientific way of thought in the social sciences.

To illustrate, the training supervisor of a large city department of health states: "It was felt that to evaluate results intensively would have taken time and effort, and this seemed better spent on educational activities. Furthermore, it was not practical to establish control groups of students and the year-to-year basis upon which the project has operated has made it difficult to plan a long-term experiment in which evaluation could play an important role." (*See Reference No. 4, p. 8.*)

It is readily conceded that an activity whose most important ingredients are the human body and the human mind does not lend itself to the carefully controlled experiments of the physical or chemical laboratory. The facts with which the trainer deals are not "hard" facts which can be manipulated at his will. They are soft and malleable facts which take the form of a kaleidoscope rather than a fixed mosaic. It is not the number of variables which is disturbing but their shifting variability. This undeniable aspect of social science admittedly makes the task of identifying causal relations with any measure of certainty most difficult.

But "scientific method" is not synonymous with "certainty." The "eternal truths" of Euclidean geometry and Newtonian physics were longer-lived than those of classical economics or Spencerian sociology, but none was immortal. We are not seeking for absolute certainty or precision in social science, nor in the evaluation of training, because one hundred per cent certainty and precision are will-o'-the-wisps which will always elude our grasp.

If we abandon the quest for certainty, the task of evaluation becomes the practical one of seeking, with as little prejudice and bias as possible, as much knowledge about the results of training as can be secured. We seek primarily for a demonstration of these results which will be accepted by others engaged in training, who can then utilize similar techniques with the hope of securing similar results. The variability of human

nature, the ability of the instructor, the place of meeting, the weather, the attitude of management and supervision, and other factors will always complicate this process. These variables must be recognized and noted in any comparative evaluation of training programs. But the existence of these variables and the false notion that absolute certainty is a *sine qua non* of evaluation should not prevent us from utilizing every evaluative technique at our command. The purposes which evaluation fulfills are more important than the difficulties to be overcome.

APPROACHES TO EVALUATION

Because a scientific way of thought is essential to competent evaluation, other aspects of this way of thought will be considered here.

There may be a tendency in the process of evaluation to seek "all-or-none" judgments, to determine that a given program is "good or bad," "a success or a failure," "effective or ineffective," "sound or unsound." Judgments of this kind are seldom valid, unless based on a more diversified appraisal which indicates that the program has been successful in reaching some objectives but unsuccessful in reaching others, effective for some participants but ineffective for others, sound in the use of certain methods and techniques but unsound in the use of others. Rather than an "all-or-none" judgment, an appraisal which indicates the extent to which the program is effective and the extent to which it is ineffective is to be preferred. A "profile" of the training program showing both strength and weakness will serve as a basis for administrative and even legislative decisions as to continuance, improvement, retention or change of instructors, retention or change of method, the provision of additional or changed training materials, etc.

The fact that evaluations are customarily made by training specialists who may have a personal stake in demonstrating the success of the program should not be overlooked. An important aspect of the scientific approach is a willingness to accept all evidence bearing on the problem, even though some evidence

may tend to disprove the hypothesis (which in the evaluation of training is apt to be that the training program is successful). Charles Darwin compelled himself to take careful notes of any natural phenomena which ran counter to his theory of evolution. Public service trainers should feel the same compulsion to search for and accept evidence which reveals weakness as well as strength in the training program.

There may be a tendency in the evaluation of training to seek for comparative appraisals of similar programs in different jurisdictions. Such appraisals are undoubtedly useful but seldom are they sufficiently valid to justify the time required to make them. The problem of evaluating a single training program is sufficiently complex without attempting comparative judgments involving many additional uncontrolled variables. Comparative appraisal may be practical at a later stage in the development of evaluation techniques, but the immediate significant problem is to appraise the extent to which a given agency with given resources has met its training problem and needs with a specific training program. Other agencies can then draw upon this evaluated experience to the extent that its problems and needs are similar. To illustrate, the key problem is not to determine whether the state-wide fire training program in California is "better" than the one in Massachusetts, but to determine how well California and Massachusetts have done their own jobs in terms of their given needs and resources. Evaluation then becomes a process of determining whether progress is being made toward stated objectives at a reasonable speed and at a reasonable expense. It may be necessary in evaluating the program of one jurisdiction to utilize the techniques and accomplishments of other jurisdictions as a frame of reference, but normally the evaluation itself should be made in terms of the needs and resources of the jurisdiction in which the training program is being appraised.

A final comment on the scientific approach pertains to the already stated difficulty of securing "objective" evidence—evidence which means the same thing to all who examine it and which can be checked by outside observers who are not con-

nected with the program. By the very nature of the problem, much of the evidence used in evaluating training will be subjective. Wherever the preponderance of the evidence is subjective, it is part of the scientific approach to seek as many cross-checks as possible, and to bolster subjective opinion with all available factual evidence. To illustrate, a subjective appraisal by the instructor in a police training course, who thinks the course is "good," is not of much value. But if the instructor's opinion checks with that of the instructor's supervisor, of the trainees, of the supervisor of trainees, of top management, of other police instructors, and of state and federal enforcement agencies which have relations with local police departments, the opinion immediately acquires far greater validity. In fact, the wider the agreement of subjective opinion the more objective it becomes.

It is not necessary to elaborate further on the scientific approach to the problem of evaluation. This approach involves relative freedom from bias, willingness to examine all evidence bearing on either success or failure, and a search for "profiles" rather than "all-or-none" judgments. Also, it would seem wise, for the present at least, to forego comparative appraisals in favor of evaluations confined to a single jurisdiction.

There are various approaches to the problem of evaluation, each of which suggests its own classification of techniques, and some of which overlap. Three of these approaches seem particularly useful and will be elaborated here. (1) We may discuss the evaluation of training programs in terms of the assumptions (often tested) of a successful program of vocational education. (2) We may discuss evaluation in terms of the various levels of public service training:—the single class, lecture, demonstration, or conference; the "course" of which these are a part; the agency training program of which the course is a part; the government training program of which the agency training program is a part; and, perhaps, the intergovernmental training program of which the government training program is a part. (3) Finally, and most important, we may discuss evaluation in terms of objectives.

Perhaps the most convenient single frame of reference is the hierarchy of training programs indicated as number (2) above, which proceeds from the supervisor training his subordinate, through the single class and other stages, to the training program which serves a number of governments. Each of the approaches overlaps the other two, however, and there are, within the frame of reference which has been adopted, a number of key questions which partake of the other two approaches suggested above:

1. Have the "principles" of successful training been observed?
2. What was the immediate instructional objective? Did employees *learn* what it was intended to *teach* them? Would alternative instructional methods or materials have been preferable? Was the instructor competent?
3. Was the instructional objective itself a valid one?
4. Did employees apply newly acquired knowledge, information, attitudes, and skills on the job?
5. What was the objective from the standpoint of service to the public? To what extent was this objective fulfilled?
6. What is the relation between the training program in question and the total training program? Does this training program depend for its success on training programs for other classes of employees? Does this program have legitimate priority over other training programs which were considered but not undertaken?

Some of these questions are obviously more meaningful at certain levels of the hierarchy than at others. For example, an appraisal of the extent to which accepted principles and techniques of successful training have been used becomes more significant when pointed at a single class than when aimed at the broad range of an intergovernmental training program. Similarly an appraisal in terms of the fulfillment of public purposes is more significant when related to a diversified training program than when related to a single group meeting.

Since the other chapters of this report are devoted to an exposition of the principles and practices of successful training, little needs to be said here regarding these principles and prac-

tices. Evidences of failure at some other point—e.g., evidence that employees are not applying to the job what is learned in the training program, or that the agency is not adequately fulfilling its public purposes—should lead to a thorough appraisal of the principles followed and the practices used to see if they conform to accepted educational standards. This will have one of two results. If principles and practices do not conform to accepted standards the remedy is obvious. If principles and practices do conform, then it becomes necessary to modify traditional techniques so that they will produce results, or to modify the objectives of the training program which may not have been related to the training needs of the agency. It is in this modification of tradition that evaluation is likely to make its most productive contribution to the training program.

One of the principles of successful training is that it must be based on the active interest of those to be trained. Unless the interest of trainees is aroused to the point where they participate actively in the learning process, the educational effort will fail. One index of the extent to which interest is aroused, for example, in a course where attendance is entirely voluntary is the extent to which attendance is maintained. Some training courses begin with an attendance of 50 which dwindles away in successive meetings to less than a dozen. Courses of this type have not fulfilled their objectives, at least for those who come and cannot be persuaded to remain. This may be because the course is not well organized and conducted, or it may be because the group was not properly selected. Even under conditions of dwindling attendance, if the dwindling stops before the group falls completely away, the course may be highly successful for those who remain and continue with the work. These employees may be just the ones for whom the course was initially planned and their interest has apparently been maintained.

On the other hand, in certain courses attendance actually increases as the course progresses. If the evaluator can be certain that attendance is completely voluntary (i.e. that there are not even subtle pressures by supervisors on employees to attend) the attendance index is a satisfactory criterion of employee interest.

But it is no more than just that. Employee interest is an essential ingredient of a training program, but its mere existence does not demonstrate that the program meets its objectives or that its objectives are valid. Employees may attend because the instructor "puts on a good show" or because they are actively interested in certain aspects of the course which make no contribution to more effective job performance. It is easy to fascinate the police patrolman with the intricacies of scientific crime detection in the laboratory, but it might be very difficult to demonstrate that anything more than a general acquaintance with available techniques contributes to more effective beat patrol. The attendance index, therefore, may be considered a negative rather than a positive check on the program. If attendance falls away, something is wrong (either in the conduct of the course or in the selection of the group), but if attendance continues, it does not prove much beyond the fact that interest is aroused and maintained. The same conclusion may be drawn when employees who complete one course enroll for another. This proves only that the courses are appealing to employee interests. This is important but not conclusive.

Similar comments could be made on other techniques of determining the extent to which accepted principles and practices have been followed. The application of these techniques demonstrates only that the principles have been followed. As an example, training content may be checked against job analysis. But a demonstration that training content is based on job analysis proves only that and nothing more. The basic objectives of a training program are not to conduct a standard educational activity but to effect a change in the work habits of employees which enables the government to render more effective service to the people. Conformance to accepted principles and practices is only a means to this end, and adequate evidences of success or failure must be sought in terms of the ends rather than the means. We will assume, therefore, that training programs will continue to be matched against accepted principles and practices based on experience, and that these principles and practices are self-evident in the remainder of this report. With this assump-

tion, let us consider in turn the various levels of the training hierarchy referred to previously.

EVALUATING TRAINING BY SUPERVISORS

This is the most common of all training activities, and yet the most difficult of all to evaluate because usually the trainer and the evaluator are one and the same person. The supervisor himself is most often the best judge of the extent to which his training activity has been effective. The results of training activities by supervisors will be reflected in measurements of the government's service to the public. As part of a total training program, the role of the supervisor should be checked whenever measures of government performance suggest a training deficiency. Another check on training by supervisors will come if the central personnel agency reviews disciplinary cases carefully to see if one of the reasons for an employee's failure on the job is the supervisor's failure to inform the employee on the precise nature of his duties and to train him in the best methods of performing them.

EVALUATING THE ISOLATED CLASS, LECTURE, DEMONSTRATION, OR CONFERENCE

Objectives for group training can be stated most precisely when limited to a single meeting of the group. Evaluation of the single meeting is therefore relatively easy to make. The group leader is attempting to accomplish only a few limited and rather precise objectives—for example, to teach firemen to tie specified knots, to raise the speed of typists from x words a minute to y words a minute, to develop an appreciation by command officers of a police department of the importance of a public relations program, to give interviewers in a welfare agency skills in interviewing, to stimulate supervisors to recognize and appreciate their responsibilities.

The extent to which some of these objectives have been achieved can be discovered by testing. For example, a policeman's knowledge of state laws expounded to him by an attorney can be tested by giving him a few actual cases and asking him to

state the offense committed, and his ability to shoot a revolver can be tested on the range. All the possibilities of an examination program can be utilized at this point to discover whether the trainee has learned what he was taught. It goes without saying that examinations should be constructed in accordance with the best practices of test procedure, which are outlined in another volume of this series. Also, the examination may assume a variety of forms—it may be written or oral, or may consist of a performance test.

The limitations of the examination as an evaluation device are apparent. If properly constructed it indicates only whether the trainee can reproduce at a given time what he was taught. As such, it is a useful check on instructional methods, and a low average rating on the examination is a reflection on the ability of the group leader or on the methods he uses. But the examination says nothing about the value of the subject matter which has been acquired, nor about the extent to which newly acquired skills and knowledge are applied on the job. The government is interested in the patrolman's skill on the pistol range only if it is equally available to him on the beat. A stenographer's speed in a drill class must extend to her performance on the job if the objectives of the training program are to be fulfilled. The examination also has little use in testing results attained by the conference method.

These limitations explain why public service training has so little to gain from experience with educational measurements in the schools. The latter are based primarily on standardized test procedures which are useful in testing student knowledge, but in public service training objectives transcend the classroom, as indeed do the objectives of the public schools.¹

The limitations of examinations are also limitations on the forms used in several jurisdictions for the appraisal by observation of specific training methods. These forms are also subject to the previously discussed limits of the process of basing an ap-

¹For good examples of examinations see those used in the training programs of the Tennessee Valley Authority, the Social Security Board, the Bureau of Internal Revenue, and the Institute for Training in Municipal Administration.

praisal of training on the accepted principles of successful education. These forms have the merit of insuring that the observer will evaluate all pertinent phases of the lecture, conference, or other method being used. If carefully designed, they will indicate whether the conference is a "good" conference or the lecture a "good" lecture, and as such will be useful in checking on the training methods used.²

Another check on the lecture method which may shock both the lecturer and members of his audience is to ask members of the group to summarize the lecture immediately after it has been heard. Doing so usually reveals a low degree of absorption, even by intelligent and attentive members of the group, and this demonstrates the value of supplementing the lecture with written materials and other devices.

Limitations on the devices already discussed suggest the importance of searching farther for methods of evaluation. These will be discussed when this same point is reached in other levels of the hierarchy of training programs.

EVALUATING THE COURSE

Certain devices applicable to the course, or series of group meetings, have already been discussed in preceding paragraphs and their values and limitations are almost identical, whether applied to a single group meeting or to a course. An average increase in attendance of 25 per cent in four zone schools for policemen in California seemed to indicate that the schools had met a need felt by police officers in those areas, although the increase would have required proper discounting if there had been any evidence of pressure from superior officers on the men to attend those voluntary meetings, or if service rating and promotion credits had been used as an additional incentive to attendance.

The course which meets over a period of time permits the use of "before-and-after" examinations, which, if properly con-

² Forms of this type have been devised by the Training Division of the Tennessee Valley Authority for appraising group meetings and lectures. A check list for evaluating conferences will be found in *A Report on a Training Program for U. S. Forest Service Officers, Plains Shelterbelt Project, Extending from January 6 to April 1, 1936.* (See Reference No. 47, p. 8.)

structured and standardized, may show how much knowledge and skill have been added by the course.³ The danger of comparative judgments is illustrated by a course in police administration for command officers given in several cities simultaneously. Examinations given in two cities showed a difference of about 20 points in the average grade. Careful analysis revealed that this was due to a difference, not in the quality of instruction, but in the caliber of the two groups at the outset of the course.

There is a further danger in the use of the examination technique that undue reliance on the average grade will cause those responsible for training to lose sight of individual differences and to be satisfied with a relatively high average grade, when, as a matter of fact, a sizable minority of the group qualify just barely, if at all. This danger was avoided in one city in New York, where seven men who failed to pass a written examination at the end of a six-weeks police school were required to attend a second six-weeks course and pass a second examination. A more refined use of the examination technique is suggested by the experience of the Central Guard School for prison officers in New York State. A school rating for each officer enrolled was constructed on the basis of performance in the school. If a valid system of service ratings had been in effect in the penal institutions, these school ratings could have been correlated with subsequent service ratings to determine if predictions of success in the school were actually fulfilled on the job. If this correlation were low or nonexistent, it would suggest either that the school was not properly organized and conducted, or that training of supervisors was necessary in order that they might properly utilize the best products of the school.

The use of all available cross-checks of subjective opinion is illustrated by the evaluation technique of the Training Division of the Tennessee Valley Authority. Evaluations of each course are made by a training committee composed of participants, representatives of management, representatives of the Training

³This procedure has been followed in New York State schools for sanitation officers and by the Michigan State Police in a refresher school for patrolmen. In the latter case the second examination showed an improvement from an average grade of 50 per cent to one of 70 per cent.

Division, and representatives of the Personnel Division. The composite evaluation is based on examinations, judgment of instructors, maintenance of interest, extent of improvement on the job, and evidence of promotion as a result of training. The techniques used are observation by committee members and supervisors; conferences between training representatives, supervisors, and participants; questionnaires to supervisors; and questionnaires to participants. Evidence that trainees have been promoted in preference to untrained men may be comforting to the trainer, and it does indicate that trainees are making good on the job. If attendance is voluntary, however, it is disturbing to reflect that the very men who showed sufficient initiative to enroll in the training program might have shown that same initiative on the job without training and have been promoted anyway.

This brings us back to a point already discussed in preceding pages in connection with the evaluation of the individual group meeting. Evaluation gains in significance when it reaches beyond the training program itself into the work of the employees trained. A number of devices suggest themselves immediately.

Questionnaires

What do employees think about the course and were they able to apply newly acquired skills and knowledge on the job? The use of a carefully constructed questionnaire addressed to trainees will reveal much information useful both to the instructor and to the training officer. Free opinions may depend upon preserving the anonymity of responses. The questionnaire should be designed so as to record something more than mere general satisfaction or dissatisfaction with the course. Employees should be asked to indicate specific strong and weak points, specific applications to the job, and specific reasons for inability to apply training on the job. Some questionnaires of this type include various responses on several specific aspects of the course and ask the trainee to check the response which represents his opinion. This has the disadvantage of putting answers into the mouths and minds of trainees, and "free" answers are perhaps to be

preferred for their spontaneity even though something may be sacrificed in the detail and pertinence of the response.

A questionnaire to those who had completed a course given by the Social Security Board for stenographers in the use of a style manual, showed:

1. A desire on the part of trainees for further training in grammar and punctuation.
2. Trainee approval of informal instructional methods, such as open discussion and blackboard illustrations.
3. Trainee disapproval of the instructor's practice of reading the manual verbatim.
4. Belief that uniformity in correspondence procedure was the principal advantage derived from the course by the Board.
5. Recognition that the fullest use of the training received would come only when supervisors and those who dictate letters had also been trained in the use of the manual.

This last point is important because it illustrates that a low appraisal of the results of training may indicate not a defect in the training course itself but a lack of recognition of the dependence of the course for its success on additional training for other classes of employees. This is an aspect of an agency training program and its evaluation which cannot be overlooked.

A similar questionnaire to T.V.A. employees who attended a lecture series showed that the lecturers were considered competent, that physical arrangements were satisfactory, that the series had made a significant contribution to the purposes which employees had in mind in taking the course, that the amount of outside reading was relatively little, and, of most importance, that at least half the group had heard or read something which challenged their beliefs or caused them to change their minds about important ideas. The evaluation would have been more significant if trainees had been asked to specify, on this last point, what specific beliefs had been changed or modified, and how—by reading, by discussion, or by the lecturer.

The specification of new and changed ideas by participants is particularly important in appraising the use of the conference method for training supervisors and administrative personnel.

Experience indicates that enthusiasm and morale are easily generated by a competent conference leader. There is usually evidence *in the conference* of changed or modified ideas. Participants show mounting enthusiasm for the opportunity to exchange ideas and experience. But it is not the primary purpose of the training program to conduct a "good" conference. Its purpose is to stimulate thought and new ideas in the conference group which will be retained and applied to the job. To evaluate the extent to which this latter purpose is achieved, managers of Oklahoma cities participating in a three-day training conference were asked, after they returned home, to indicate the most significant ideas they had gained in the conference, and to indicate any changes they were planning in their administrative organization as a result. Responses to this request indicated more concretely the lasting results of such a conference after the smoke of the battle had died away. The responses would have been even more significant if sufficient time had elapsed to admit evidence of actual rather than planned changes. Similar specific evidence of operating improvements was secured following a training course for supervisors of the California State Employment Service.

Evidence on the Job

This last illustration suggests the importance of searching for evidence *on the job*, that skills, knowledge, and attitudes have not only been acquired by trainees but are being utilized, which is the complete purpose of the training program. Evidence that a patrolman has actually used a jiu-jitsu hold learned in a training school to disarm and arrest a dangerous criminal is worth far more than all demonstrations in the course itself of the ability of patrolmen to use this hold. Similarly, the saving of a child's life by approved life-saving methods learned in a training program is worth far more than any number of demonstrations in the swimming tank of ability to use the method.

It is at this point that a careful analysis of objectives is called for. A training course for social workers, the sole objective of which is to improve interviewing skills, should not be blamed if

it is subsequently discovered that these workers do not know and apply eligibility requirements, although this may suggest a lack of proper balance in the agency training program as a whole.

The immediate objectives of the training program may be for example to:

- Increase production
- Reduce costs
- Change attitudes
- Develop understanding of agency objectives
- Provide new skills
- Retrain in old skills
- Impart information
- Stimulate operating improvements

When the objective has been defined, a method should be devised for discovering the extent to which the objective is realized on the job.

One method of doing this is to tap the opinion of supervisors of trainees. Here again, the existence of a valid system of service ratings may simplify the problem. If such a system is lacking or to supplement it, a direct questionnaire to supervisors may be desirable. Such a questionnaire would be similar to that sent to trainees and would be constructed so as to elicit specific evidence that the purposes of the training course are or are not being fulfilled. If service ratings provide profiles of the strengths and weaknesses of employees, specific training needs for a given class of employees may become clear, and a training program devised to meet those needs. A second group of ratings should then reveal whether the training program has been successful in meeting these specified needs. It is of some significance, however, that the Training Division of the Tennessee Valley Authority attempted, without success, to discover a relationship between participation in training and service ratings. Further experimentation is sorely needed.

Apparent Results

Often, the statement of objectives will reveal other and more satisfactory indices of success or failure. It is the stated purpose

of one training program to reduce workmen's compensation costs to the city. What better evidence is there of the fulfillment of this purpose, than that injury claims paid were reduced 66 per cent from \$61,879.21 in one year to \$20,565.86 in the next, and that days lost due to injury were reduced from 2,747 for the first 8 months of one year to 733 in the first 8 months of the second year following?⁴

To increase production is the specified purpose of a training program for men who plant trees for the United States Forest Service. Making due allowance for other factors, it is estimated that the training program resulted directly in a 25 per cent increase in production, and indirectly, in an even greater increase.

It may be the purpose of a training program to increase production and reduce costs, as in the case of a program conducted by the Agricultural Adjustment Administration for enlargers in its photographic laboratory. Records indicated a 50 per cent increase in production and a 25 per cent reduction in unit costs following the training program.

It may be the purpose of a training program to reduce errors, as in a program for letter writers conducted by the Farm Credit Administration. Analysis showed that following the training program the unit which reviews all outgoing mail was returning about 2 per cent of all letters for correction, where formerly it had returned 10 per cent. Analysis showed also that the length of letters had been reduced about 25 per cent, which, when the unit cost of a letter is estimated at 75 cents, represents a significant saving. (*See Reference No. 19, p. 56.*)

It is readily conceded that the possibilities of tangible evidence of the type illustrated in the foregoing paragraphs are exceptions rather than the rule. But the exercise of a little ingenuity will produce many more. One of the purposes of training supervisors is often to induce them to accept responsibilities for personnel which are legitimately theirs. Following one such program, the central personnel agency reported a marked reduction in the referral of supervisory personnel problems. A program de-

⁴Based on actual experience of the San Diego city government in 1936-38. Similar figures are available on the safety training program of the National Park Service.

signed to improve the physical condition of employees may be checked by an analysis of sick-leave records. A training program in telephone techniques for employees who "meet the public" over the telephone may be checked by a supervisory audit of telephone calls against standards developed by the telephone company for the prompt and courteous handling of calls.

Stimulation of Operating Improvements

A deliberate attempt to uncover evidence that a training course has fulfilled its purpose of stimulating operating improvements may be very rewarding. A public relations training program for department heads of the Detroit city government resulted in a survey of customer relations by the Water Department and the publication of a manual on public relations for employees of the Police Department. A school for sewage plant operators of a number of New York cities resulted in the establishment of several small laboratories for making daily tests. A school for assessors in the same state resulted in the installation of improved assessment maps. A series of training conferences for command officers of the Fire Department in Lansing, Michigan, resulted in the development of an inspection system and a manual of rules and regulations.

Lest too much weight be assigned to measurements of the type just described, qualifications must be noted. Operating improvements still fall short of the end purposes of government. Government agencies have not been established by the people to erect laboratories, construct assessment maps, or develop systems of inspection. In these cases, the agencies were established to protect the community from disease resulting from the careless disposal of wastes, to appraise property at its fair value as an equitable basis of taxation, and to prevent fires resulting from unsound building construction and the careless handling of inflammable materials. The ultimate test of training programs lies in the fulfillment of these basic government objectives. Some devices, potentially useful for this purpose, will be considered in connection with agency and government training programs.

It may be salutary also to note the possibility that an examina-

tion of performance on the job may often demonstrate failure rather than success of the training program. To illustrate, a training program for county case workers, conducted by a university, involved the careful supervisory review by the instructional staff of two cases carried by each student. This course of training stimulated the professional point of view, and any trained observer would have found the course meeting all the accepted standards of a successful training program. Subsequent observation of trainees at work revealed, however, that the treatment of supervised cases in the training course was of a quality so far superior to that possible under the normal case load that the morale of the employees had been severely depressed. While there can be no objection to acquainting case workers with the principles and techniques of adequate case work, there is doubtful wisdom in basing the course on techniques which are beyond the limits of attainment by the worker on the job.

It should be recognized that none of the measurements just discussed is definitive. At best they are but indications which make part of a diversified picture of the training program and its effect on the operation of the government. It should be noted also that these measurements say nothing of what might have been accomplished if other methods, a different instructor, or different materials had been used. While this question of evaluating alternatives is important, specific measurements are not yet available. Intelligent choice of alternatives waits upon the development of experience based on the measurement techniques suggested.

EVALUATING THE AGENCY TRAINING PROGRAM

The next level in the hierarchy of employee training beyond the course is the total program conducted by a government agency or by a government jurisdiction. Such a program consists of a variety of courses and activities designed to meet the needs of a variety of employee groups. The problems of the agency (e.g., a bureau in a federal department or the police department in a city government) and of the government jurisdiction (e.g., a state or city government) are discussed together because their

problems of evaluation are similar. They are the problems that arise in connection with decisions as to individual programs to conduct. They are the problems of relating training to end results, which can be done only when the training program continues for a period of time long enough to have an effect on end results. For the sake of simplicity, "agency" will be used in this section to denote both an entire government jurisdiction and a department, bureau, or other organizational unit of a government. In any case, an agency training program signifies a program more diversified than a single class or a single course.

It may be suggested that an agency training program can be evaluated by summarizing the evaluations of the individual training activities comprising the program. It goes without saying that the results of specific activities have a bearing on the worth of the entire program, but to say that this is all there is to evaluating the agency training program is an oversimplification.

There are at least four aspects of evaluation of the agency training program which appear only slightly, if at all, in the evaluation of specific activities: (1) Where the agency has a central training unit there should be an evaluation of the administrative decisions of this unit; (2) there must be an evaluation of the way in which relationships among specific training activities have been observed; (3) there must be an evaluation of the relative emphasis placed upon specific training activities; and (4) consideration of the agency training program as a whole permits an evaluation in terms of end results which is seldom possible in evaluating specific activities. These aspects will be considered in the order given.

Administrative Decisions

Evaluation of the administrative activity of a central training unit involves a determination of whether the unit has made the best decisions and choices with respect to a number of phases of the program. The phases which should be considered, according to the training division of a large federal agency, are:

1. The formulation of objectives.
2. The selection of instructors and conference leaders.

3. The selection of the most appropriate method to achieve objectives.

4. Administrative decisions as to whether activity will carry credit, time and place of meeting, etc.

5. Selection of supervisory techniques which will keep in close enough touch with the activities under way to allow for changes in objectives and methods which actual experience suggests.

Evaluation of administrative activity will consider these and perhaps other factors. The ultimate test of administrative activity comes, of course, in the evaluation of the actual training done.

Relationships Among Specific Activities

Evaluation of the agency training program must consider the total training program. Evidence has already been provided of specific training activities which have been unsuccessful or less successful than they would have been if their relationships to other aspects of the training program had been perceived. This comes out most clearly in the relation between training of employees and training of their supervisors. Many a training program fails to fulfill its objective because supervisors are not equipped or trained to use trained employees. Similarly, the training of probationary firemen will bear little fruit if trainees are asked to work beside experienced firemen who do not have the skill derived from similar training.

Relative Emphasis on Specific Activities

Consideration of the total program is necessary also to determine whether priorities have been intelligently selected and whether the proper emphasis has been placed on various aspects of the program. The problem of priorities is important but difficult. In a sense it is part of the whole problem of priorities in government. The choice between two training programs is akin to the choice between alternative budget items. Often, however, the units of measurement as between training programs are not comparable. When two training programs permit estimates of financial savings and these are the only consideration, the choice

is easy. But when it becomes a question of choosing in a city government between a training program in the public works department which will contribute to the convenience of the householder by the more efficient disposal of wastes, and a training program in the police department which will contribute to the convenience of the automobile driver by reducing traffic congestion, the choice is difficult. This report can make no contribution to the solution of such imponderables beyond saying that the choice will be more intelligent if the results are known than if they are unknown, and the more measurements that are devised, the more elements of comparability there will be.

Some agencies solve their priority problems by organizing programs in response to the expressed interests of employees and suggestions made by supervisors. It is readily recognized, however, that this procedure allows neither for present but unrecognized needs nor for preparation for needs which may arise in the future. Nor does it allow for the agency whose resources are so limited that it cannot respond to all employee and supervisory requests for training.

End Results of the Program

It has been implied throughout this chapter that the final test of the success of training lies in some measure of the end results achieved by the agency in which the training is conducted. The problem of evaluation becomes at this stage the problem of measuring government activities—a problem which is puzzling administrators and researchers at all levels.⁵ This problem cannot be discussed here other than to illustrate the kind of measurements to which reference is made.

The California Highway Patrol instructed its officers in 17 of California's 58 counties in the principles and practices of selective enforcement and enforcement analysis as methods of traffic control. In comparing records for the first 8 months of 1939 with the first 8 months of 1938, it was found that the traffic fatality

⁵For an exposition of the problem and a review of available measurement techniques in city government, cf. Clarence E. Ridley and Herbert Simon, *Measuring Municipal Activities*. (Reference No. 37.) This volume is valuable for its clear statement of the pitfalls to be avoided in measurement and for its bibliography of other publications dealing with the measurement problem.

rate in these 17 counties had increased 2.5 per cent, while in the rest of the state the increase was 27.2 per cent. The training program was considered the primary factor responsible for the difference.

The fire protection function is another field that lends itself to measurement of end results. One of the primary functions of a fire department and its training program is to prevent fires from occurring. One measure of this activity is the number of alarms given, and if these are properly classified and compared from year to year, it will shed light on the success or failure of training in fire prevention. A suggested classification of alarms for this purpose is:⁶

1. Alarms over which fire department has no control and which should not be considered:

“Accidental” alarms of fire alarm system

Rescue work

Needless calls—no actual fire

Vehicle in street

Marine fires

2. Alarms over which fire department has control and which should be included:

Malicious false alarms

Rubbish fires in vacant lots

Rubbish fires near buildings

Dump fires

Grass or brush fires

Miscellaneous outdoor fires

Fires in buildings—these can be broken down into classes of buildings.

The differentiation of alarms will not only test the results of the fire prevention training program as a whole, but will suggest its strong and weak points. It should be recognized that other conditions in the community may affect the trend of alarms as much if not more than the training program.

Another measurement of fire training in terms of end results

⁶ This classification is suggested by Horatio Bond, Chief Engineer, National Fire Protection Association.

has been found in the direct relation between training in the use of salvage covers and reduced property loss, which is a primary objective of fire protection activity. The measurement would be more refined if expressed in terms of "loss per fire."

There are certain measurements of police protection activity which should be considered in the measurement of a long-term police training program. The proportion of crimes cleared by arrest, the proportion of arrests followed by conviction in court, and the traffic accident fatality and injury rates are the most common of these. Careful analysis of these and similar records from year to year should reveal the comparative success or failure of the police departments in meeting its end objectives, and this success or failure should reflect on the training program, although other factors will need to be taken into account. As in the case of fire alarms, a breakdown of these over-all indices into various classes of crimes should be particularly helpful in pointing up the strong and weak points of the training program, in suggesting gaps and points of overemphasis, etc.

A state welfare agency found its training program—a comprehensive program of development for the entire staff—successful in terms of accelerated reduction of pending applications, increased speed in review of cases, and a better community understanding of the agency program as a result of more effective interviewing and a wider use of community resources.

The Federal Bureau of Investigation, which maintains an intensive training program, finds over a period of three years that the average number of convictions secured per special agent has increased from 6.4 to 8.3 and that the recoveries, fines, and savings effected per special agent have increased from \$57,244.77 to \$72,845.97. In order for this to be a valid appraisal of the training program, it must be assumed that crime conditions have remained approximately the same and that the increases are due to increased ability effected by training and not to increased opportunities for convictions, recovery of property, etc.

These measurements of the public purposes of a government agency as an evaluation of its training program are applicable primarily to the total training program of the agency and gener-

ally should be used only when the training program has continued over a period of time sufficiently long to permit extraneous factors to cancel out. The police measurements suggested above, for example, have been applied to a city department training program which has continued for ten years. Careful examination of other factors led the police chief of this city to conclude that the general improvement over the years in all indices considered was due to the training program and a greatly improved selection procedure. If such a conclusion had been drawn at the end of a single year, it would have been a highly doubtful one.

EVALUATING THE INTERGOVERNMENTAL TRAINING PROGRAM

A number of training programs are conducted for the officials and employees of many governments. These programs are usually conducted by state boards for vocational education or by national associations of public officials. Many of the evaluation techniques already discussed are used with equal validity to evaluate these programs.

For example, at the conclusion of a five-year training program conducted for firemen by the Virginia State Board for Vocational Education, it was discovered that fire losses had decreased in Virginia to 40 per cent of the 1931 figure, while national fire losses had decreased only to 55 per cent of that figure. One city reported a marked reduction in fire alarms. Another reported that whereas before the training program fire losses had ranged annually from \$5,000 to \$20,000, fire losses were cut to \$2,700 in the first school year, \$1,900 in the second, \$1,600 in the third, and to less than \$1,000 in the fourth.

Educational standards, administrative practices, attendance, trainee and supervisory appraisal, voluntary reenrollments, evidence of operating improvements, and other devices already discussed are all used in the evaluation of these programs. The New York State Department of Education has published certain criteria, expressed in terms of educational and administrative standards, for the approval of a public service training program in that state. (*See Reference No. 33.*)

Another state bases its opinion that the state-wide training program has been successful on:

1. Appraisal of instructors
2. Statements of trainees
3. Percentage of attendance
4. Voluntary reenrollments
5. Opinion of department heads
6. Public opinion
7. Willingness of educational agencies to continue sponsorship.
8. Adoption of methods by other states.

This same state finds evidence of failure in:

1. Lack of personal satisfaction on part of instructor and supervisor.
2. Lack of voluntary trainee response
3. Small enrollment.

This is a good illustration of diversified appraisal of the training program, although obviously there are some elements of evaluation not included.

The International City Managers' Association conducts a correspondence course training program, described in Chapter III, for administrative officials in cities all over the country. Although it is impossible to measure the effect of this training program in terms of end results, an impressive list of operating improvements made as a result of the instruction is available. For example:

1. The fire records system has been completely revised in a Florida city of 10,000 population.
2. A procedure for temporary allotments and supplementary requests has been installed in the budget system of another Florida city of 110,000.
3. A personnel manual and classification plan has been prepared and adopted in an Illinois city of 15,000.
4. Personnel procedures have been revised in a Michigan city of 40,000 and financial procedures in a Canadian city of 10,000.
5. The long-term financial plan has been analyzed and overhauled in a New Jersey city of 30,000.

6. The patrol-car system has been revised in a California city of 100,000.

While relying on these techniques, those responsible for state-wide training programs find that certain other evaluation devices are available. For example, the comprehensive and wide-spread training program for municipal officials in New York State has apparently resulted, in addition to other things, in (1) a stimulation of intergovernmental cooperation, due to the participation of federal, state, and local officials in the same schools, as evidenced by testimony of officials at each of the three levels; (2) increased tenure due to greater public confidence in trained employees; (3) stimulation of professional activity as evidenced by new professional associations growing out of training programs, the joining of established organizations, and subscriptions to technical journals; (4) the breaking down of provincialism due to contact with officials from other cities and other levels of government.

The experience of the Safety Division of the International Association of Chiefs of Police may be cited to illustrate an evaluation of an intergovernmental training program in terms of end results. It was discovered that of 20 cities in which the Division had conducted a traffic safety training program, 18 showed percentage decreases in traffic fatalities in 1938 over 1937 ranging from 3.4 per cent to 78.2 per cent. Increases in the other two cities were ascribed to conditions beyond the control of the training program. This appraisal might have gained in significance if comparisons had been made with 20 other cities of similar size and selected at random in which no training program had been conducted.

SUMMARY

It has been stressed in this chapter that evaluation must be made in terms of objectives. It also has been suggested that these objectives may be immediate in terms of an individual class or the training of a subordinate on the job by his supervisor, or more remote in terms of the public purposes of the government agency in which the training is given. He who evaluates a training pro-

gram must define his objectives as completely and precisely as possible. Anyone responsible for a training program will profit by the very act of stating his objectives, regardless of the extent to which he is able to discover devices for evaluating their fulfillment. This discussion of evaluation in terms of objectives may be tied together by an illustration of an evaluation chart developed by a group of supervisors of trade and industrial education, each of whom had had experience with a state-wide pro-

METHODS OF EVALUATING STATE-WIDE PROGRAMS OF FIRE TRAINING

Objectives of Program

1. TO SERVE THE EMPLOYEE

- a. To qualify him for promotion.
- b. To enhance his job security.
- c. To make him more efficient and safe when working on the job.
- d. To give him appreciation of the social significance of his job and his responsibility to the public.
- e. To develop cooperation with fellow workers.
- f. To give him self-confidence.
- g. To bring him up to date.
- h. To stimulate personal growth.
- i. To give him public prestige.
- j. To develop initiative.
- k. To develop local instructors.

2. TO SERVE THE PUBLIC

- a. To reduce the economic cost of fire.
- b. To promote interdepartmental cooperation.
- c. To promote intermunicipal cooperation.
- d. To inform the public on fire-protection activities.

Methods of Determining Extent To Which Objectives Are Fulfilled

- a. Number of trainees promoted. Proportion of promotions from trainees. Number of trainees on promotional eligibility lists.
- b. Number of lay-offs from trainee group compared to untrained group.
- c. Supervisory opinion. Comparative figures on employees' injuries and loss of life. Service ratings. Performance in drills. Use of approved practices.
- d. Supervisory opinion.⁷ Records of instruction.
- e. Service ratings where available.
- f. Service ratings where available.
- g. Service ratings where available.
- h. Service ratings where available.
- i. Service ratings where available.
- j. Service ratings where available.
- k. Number of competent instructors selected from trainee group.
- a. Fire losses and insurance rates. (In comparison with general trends, or with records prior to training program.)
- b. Specific examples of formal and informal cooperation.
- c. Specific examples of formal and informal cooperation.
- d. Specific examples of educational activities.

⁷Although not suggested by the group which developed this chart, use of some of the emerging techniques of measuring public opinion and reaction to government and public employees may be useful in determining the extent to which employees have developed an appreciation of the social significance of their jobs and a sense of responsibility to the public.

Objectives of Program

- e. To reduce the loss of life by fire.
- f. To reduce fire injuries.
- g. To interest local community in better fire-fighting equipment.
- h. To interest community in better fire-prevention measures.
- i. To improve morale.
- j. To raise standards of selection of personnel.
- k. To reduce cost of fire protection.
- l. To improve legislation.
- m. To improve fire-prevention procedures.
- n. To promote public responsibility for training.
- o. To promote discipline.
- p. To develop organization.

Methods of Determining Extent to Which Objectives Are Fulfilled

- e. Statistics on loss of life by fire.
- f. Injury records—specific examples.
- g. Extent to which facilities and equipment are expanded.
- h. Clean-up drives.
- i. Supervisory opinion. Comparative turnover on long-time basis.
- j. Appraisal of standards.
- k. Comparison of fire department budgets.
- l. Improved building code.
- m. Number of fires. Fire-prevention legislation.
- n. Extent to which community supports program financially. Extent to which state board has been able to diminish support from state and federal funds. Development of local instructors. Number of local training programs. Active interest by other local officials. Public opinion represented by council reaction to budget proposals.
- o. Supervisory opinion.
- p. Supervisory opinion and observation.

gram of fire training. None of the indices in the second column of this chart was considered conclusive, but each was considered indicative if used carefully.

The differentiation in this chart between trainee and government objectives is worthy of comment. Normally these objectives will be in harmony, but the possibility that they may occasionally conflict has already been noted.

It has been suggested also that evaluation in terms of objectives involves an appraisal of the objectives themselves, as well as of the extent to which they have been fulfilled. To illustrate, the Training Division of the Tennessee Valley Authority assumes that training must be decentralized by placing responsibility for increasing efficiency on present jobs on the supervisory line, and the Division is constantly reviewing its program to determine the extent to which responsibility has been so placed. But the Division has, thus far, been unable to discover a device for proving that decentralized training is more effective than centralized

training. The evaluation, in this case, is in terms of an assumption rather than an evaluation of the assumption itself. A training program may be successful in fulfilling its objective, but if the objective is to teach an outmoded method or procedure, the failure is obvious.

It is to be hoped that this chapter has not underemphasized the numerous factors which always arise to becloud the process of evaluation. Changes in administrative personnel, new statutes, budget decreases, newspaper campaigns, political activity, and other extraneous factors often have as much to do with the effect of the training program as the training program itself. There are always intangibles which need to be weighed but cannot be measured. Even when measurements are related to end results an element of subjective appraisal always enters in determining the relative weight, in comparison with other factors, of the training program in producing the results indicated.

It is also to be hoped that the purposes of evaluation have been presented with sufficient appeal to justify any efforts put forth in the years to come to isolate the effects of training, in order that public service training all along the line may be improved, strengthened, and adapted to the changing needs of government and society.⁸

⁸For specific viewpoints, suggested techniques, and critical comments, the author of this chapter is indebted to the following persons in addition to members of the committee: Frank L. Ahern, Chief, Safety Division, National Park Service; Lieutenant Rex R. Andrews, Department of Police Training, Wisconsin Schools of Vocational and Adult Education; Harold I. Baumes, Assistant Supervisor in Charge of Public Service Training, Virginia State Department of Education; Horatio Bond, Chief Engineer, National Fire Protection Association; George Brereton, Assistant Supervisor of Police Training, Bureau of Trade and Industrial Education, State Department of Education, California; Hugh Butler, Chief, Basic Section, Training Division, Social Security Board; Hugh H. Clegg, Assistant Director, Bureau of Investigation, Department of Justice; A. E. Dunsmore, Head, Training Division, Bureau of Internal Revenue, Treasury Department; Robert P. Farrington, Supervisor of Public Service Training, State Department of Education, California; David F. Glines, Assistant Supervisor of Fire Training, Bureau of Trade and Industrial Education, State Department of Education, California; Lee S. Greene, Supervisor of Training in Public Administration, Tennessee Valley Authority; John J. Hader, Training Adviser, Bureau of Employment Security, Social Security Board; E. F. Hartford, Principal Supervisor of Instructional Materials, Tennessee Valley Authority; J. Edgar Hoover, Director, Bureau of Investigation, Department of Justice; Wm. D. Hopson, Director, Arkansas Municipal League; Robert D. Hubbard, Division of Training, Department of Agriculture; J. Klahr Huddle, Director of Foreign Service Officers' School, State Department; Lieutenant Franklin M. Kreml,

Safety Division, International Association of Chiefs of Police; W. J. McGlothlin, Senior Administrative Assistant, Tennessee Valley Authority; R. O. Niehoff, Senior Supervisor of In-Service Training, Tennessee Valley Authority; James W. Parry, State Supervisor, Public Service Training, Michigan State Board of Control for Vocational Education; Wm. L. Schurz, Chief, Training Division, Social Security Board; Herbert Simon, Bureau of Public Administration, University of California; Herbert A. Stevens, Chief, Training and Placement Unit, Department of Interior; Lennig Sweet, Chief, Division of In-Service Study, Social Security Board; P. W. Thompson, Chief of the Division of Personnel Management, Forest Service, Department of Agriculture; Agnes Van Driel, Chief, Division of Technical Training, Bureau of Public Assistance, Social Security Board; O. W. Wilson, Professor of Police Administration, University of California; Elton D. Woolpert, Assistant Director, Institute for Training in Municipal Administration, Chicago, Illinois.

Chapter VII

The Central Training Unit

AS THE functions of government in all jurisdictions grow more complex it becomes increasingly difficult for executives and administrators in charge of large government organizations to visualize, initiate, and personally supervise effective training programs for the many classes of workers for whose productivity and efficiency they are responsible. Yet this very complexity of the public service makes the need for effective employee training more imperative than ever before.

The executive finds that he must have assistance in order properly to discharge this obligation. He may turn for advice and assistance directly to those officials who most closely share with him the operating responsibility of the organization. Together they may determine training needs and may put into operation a program of training.

On the other hand, the executive may decide that he needs the assistance of some person, or group of persons, specially prepared and experienced in the field of employee training, to assist him and his colleagues in carrying out this important administrative function. This chapter will be devoted to a consideration of the activities and responsibilities of such specialists. For the purposes of this report they will be referred to as central training units, indicating that they operate from an organizational center, of which they are themselves a part. In actual practice such "units" may consist of a single training officer or of a unit, section, division, or bureau.

Central training units may exist at more than one level in the same organization.¹ It frequently happens, also, that sub-

¹The New York City Civil Service Commission has a Bureau of Training which operates as a central training unit for all New York City employees. The United States Department of Agriculture has a Training Division, and several of the bureaus of the Department themselves have training units. In

ordinate branches of large organizations have local central training units while the organization as a whole has none.²

The single training officer, operating without the assistance of other training specialists who report directly to him, can be found in fully as many types of situations as can the organized training unit. In some instances there is need for but one person to perform satisfactorily all the functions of a central training unit; in others, lack of funds has prevented the development of a contemplated staff. Unassisted training officers are found most appropriately either in comparatively small organizations or in subdivisions of larger organizations. Mention has been made of the existence of central training units at more than one organization level in large departments of the national government. Such a unit at the bureau level could consist of but one person reporting, not to the chief training officer of the department, but to the bureau chief or someone on his staff. Similarly, training officers, rather than units, may be located in field offices and may report to local administrative officials rather than to a central departmental or bureau training officer.³

the Social Security Board there is a Training Division for employees of the Board, and in its large Bureaus there are other training sections or divisions whose function is the planning, supervision, and reporting of training programs for state employees. In the Railroad Retirement Board the central training unit at the time of the preparation of this report consists of one training officer and his secretary.

² The Federal Bureau of Investigation and the Bureau of Prisons have centralized control of employee training, while the parent Department of Justice has not yet (December 1940) organized a central training unit for the whole department. A similar situation exists in other federal departments and is quite usual in other government jurisdictions, notably at the municipal level, where the police and fire departments frequently have highly organized central control of training although the city government itself has no central training unit.

³ Three bureaus of the United States Department of Agriculture illustrate three different organization plans, although in none of the three are the persons responsible for training under the administrative control of the Training Division in the Office of Personnel of the Department.

In the Forest Service training is very intimately tied in with management. In Washington the official responsible for training activities carries the title, Staff Assistant in Administrative Management, and reports to the Assistant Chief of the Bureau, who heads the Administrative Management and Information Divisions. Only a part of his time is given to training matters. He has no staff. In most of the regional offices there is a single training officer, usually so entitled, who is directly responsible to the Regional Forester. He serves in a staff capacity while most of the actual instruction is given by line supervisors.

The Soil Conservation Service has a Chief Training Officer in Washington who is the head of the Training Section of the Division of Personnel Management. In each regional Office there is a regional training officer, who is the chief of a training section of the Regional Division of Personnel Management,

FUNCTIONS OF CENTRAL TRAINING UNITS

In varying degrees both single training officers and organized training units usually perform two types of functions, which may be considered to correspond roughly to what have been designated as line and staff functions. A training officer or unit may act in an advisory capacity or may have operating responsibility, or both. In some instances both types of activity can be combined in one project.

At this point it should be remembered that the discussion in this chapter concerns types of central training units and their functions, while the differentiation between centralized and decentralized instruction, as carried on in an organization, was taken up in Chapter III. To avoid possible confusion, it should be stressed here, as it will become clear from examples cited, that central training units frequently have much to do with what has been called decentralized instruction, as well as with centralized instruction. It is probably fair to state that the greater part of the activities of most central training units, particularly those at the higher organization levels, partake of

responsibility to the Regional Conservator. In each region there are special staffs for different problem areas. On each of these area staffs there is a training technician who spends up to 25 per cent of his time on training. At each camp, or lowest operating unit, there is a training committee. All of these persons, or groups, at the different organization levels perform central training functions of some sort. Although the training specialists in the field are responsible to local administrative authorities, there is direct communication between the training specialists at the different levels. Thus the Chief Training Officer may be held responsible for planning, coordinating, and directing the training activities of the entire Service.

In the Farm Security Administration the organization of training is on a still different basis. As in the Soil Conservation Service and in the Department as a whole, centralized responsibility for training has been given the personnel officer, who, in this instance, bears the title, Director of Personnel and Labor Relations. In the Personnel Division in Washington there is a Training Section under a chief. In each of the 12 regional offices there is, on the staff of the Regional Director, a Personnel Adviser, who is the head of the regional division of personnel. He has a responsibility with respect to training in his region similar to that vested in the Director of Personnel and Labor Relations with respect to training for the entire Administration. Both in Washington and in the various regional offices there are training committees which serve in an advisory capacity and frequently assist in the planning and initiation of training projects. The members of the Training Section in Washington spend a large proportion of their time in the field collaborating with the Regional Personnel Advisers and regional training committees in the carrying out of training programs, especially those which have been planned for all regions.

the nature of staff functions. The closer such units are to the line of actual operation, the more likely they are to have line, or operating, responsibility for a share of the training.

It is clear from the evidence that has been collected, however, that no sharp delimitation can be placed upon the character of functions performed by members of a central training unit as contrasted with the training activities of line supervisors and officials. Instances can be found where similar activities are carried on in one organization by members of a central training unit, in another by line supervisors, and in another by co-operative activity on the part of both. Because of this fact it seems best to list the types of functions and activities which may be performed by central training units without attempting to set the border line between those which are "line" and those which are "staff." Some of these would naturally fall under one heading, others under the other, while still others, such as "co-ordination," might fall into either category, depending upon the authority delegated to the training unit.⁴

⁴ Two projects of the Farm Security Administration, both involving the training of field employees, are illustrative of both staff and line activities. The first is predominantly staff, and the second, predominantly line.

Project No. 1. Training administrative supervisors to enable them, in turn, to train the staffs of approximately 2,000 county offices in office management and general procedure.

The Training Section of the Personnel Division performed the following functions:

Step No. 1. Assisted Administrator's Training Committee by suggestion and advice in the preparation of preliminary plans.

Step No. 2. Consulted with officials and technicians of the various divisions concerned in preparing the agenda for a two-weeks' course to be given at each of 12 regional offices, instructors to be provided locally.

Step No. 3. Represented the Director of Personnel in a survey of several county offices. Representatives of several Washington divisions, of a regional office, of a state office, and a district supervisor participated in this survey.

Step No. 4. Assisted in making preparations for, and attended as observers and critics, a trial course in one regional office.

Step No. 5. Collaborated in making final revision of the course agenda.

Step No. 6. Following a letter from the Administrator to each Regional Director, in which provision was made for the appointment of administrative supervisors and junior administrative supervisors to receive the training, and for the holding of the training schools, each member of the Training Section visited the regional offices in the area assigned him for the purpose of assisting in the organization of the schools in accordance with the plans already developed. In some regions this activity was largely directional and supervisory, in others, somewhat more consultative and advisory. In no instance did a member of the Training Section participate in the instruction and in very few instances did he remain in a region until the course had been completed.

Project No. 2. Course in effective letter writing.

Functions that have been dealt with in earlier chapters are mentioned briefly here; other functions are discussed more fully. It should be emphasized that the listing of these functions does not imply that all are performed by all central training units, or even by any single one.

Conducting Surveys

As a prerequisite to the effective performance of its other functions, a central training unit must secure a large amount of information concerning training needs, facilities, methods, and the like. Some of this information is of a type which can be obtained by fairly simple procedures and some requires more exacting research technique.

In the first category may be included information which may be readily secured by various survey methods, of which interviews, conferences, reports, and written questionnaires are probably the most common.

Staff members of central training units spend a significant portion of their time interviewing officials and supervisors for

Step No. 1. Recommended to Administrator's Training Committee type of course and procedure to be followed. This included a recommendation that a request be made to the Farm Credit Administration for the services of Mr. James F. Grady to conduct a series of conferences in Washington and to instruct members of the Training Section in the use of his method and materials.

Step No. 2. Assisted Mr. Grady in making all arrangements for the series of conferences in Washington, after the Administrator had given instructions with respect to attendance.

Step No. 3. Jointly conducted a similar series of conferences in the Region I office, located in Washington.

Step No. 4. Each member of the Section conducted similar series of conferences in the regional offices in the area assigned him, after administrative instructions had been sent to the field to this effect.

In the first project no actual instruction of the trainees was given by members of the central training unit from Washington, although they may be said to have given some instruction to the local officials who served as instructors. Among these were the Regional Personnel Advisers, who may be regarded as heading the central training units in each region. In the second project all instruction in the field was given by members of the central training unit in Washington on the basis of a uniform plan. The Regional Personnel Advisers assisted in making arrangements and securing letters for demonstration and discussion.

A project organizationally similar to the second involved instructions given to supervisors and boards of review with regard to the rating of employees. Members of the central training unit in Washington assisted officials of the Personnel Division in giving uniform instruction to supervisors in all parts of the country. At least one conference was arranged in each state for this purpose. This is an illustration of organizationally centralized, but geographically decentralized, training.

the purpose of securing accurate and current information for the use of the training unit. In many instances training specialists act in a liaison capacity between their own unit and other parts of the organization which they serve. They secure information from the persons they visit and give information and advice to them. Occasionally the facts can best be gathered by means of a conference attended by supervisory officials and by members of the training unit.

Questionnaires and periodic reports are mentioned last because, although they are likely to be thought of first, they are justly unpopular and usually are more adapted to statistical purposes than to the needs of a central training unit. Information needed by training officers is likely to be so highly specialized in different situations that the interview or conference technique is much more likely to be successful than the questionnaire or report method. It may be well to mention, however, that a combination of questionnaire and interview is frequently an extremely effective method of gathering information. The advantages of this method are (1) that the interviewer is provided with a complete, systematized scheme for obtaining and recording the information he seeks, and (2) that oral discussion of questions raised by the questionnaire permits amplifications, clarifications, illustrations, and explanations which can be included in the report.

Among the many types of questions which need to be asked, some of the most fundamental are the following:

What types of training and what particular projects are at present in operation and are contemplated in the various parts of the organization or jurisdiction served?

What general training needs exist that are not being met either by present or contemplated programs of training?

What facilities are available within the organization or jurisdiction or in cooperating institutions for meeting such needs?

What facilities not now available need to be provided?

Such general questions as the foregoing are most applicable as presented here when a central training unit is first established

and is seeking to obtain information to form the basis of its activities. Once that initial information is obtained, it is necessary to keep it current by constant contact with the various subdivisions of the organization or organizations to be served. If the training unit is in a position to maintain regular contacts, the flow of information between it and the organization units with which it deals becomes natural and regular.

Research

Much of the information which is assembled by research might perhaps have been included under the previous heading. It is listed separately because the processes followed require greater exactness and in some instances the employment of techniques other than those employed in the simple asking and answering of questions.

It is desirable that a careful functional analysis be made of all operations, skills, and knowledge required in the many positions to be found in any organization. As has been pointed out elsewhere, job training requirements can best be fully and adequately identified by means of such analyses. In many instances members of the training unit will find that supervisors have not been in the habit of going through this process and that they need assistance and instruction which the central training unit is in a position to supply. The unit itself needs the resulting data in order that its own activities may be based upon accurate and complete information.

It is an important function of the central training unit to conduct research in methods and techniques or to make use of the results of such research conducted by others. Supervisors frequently realize what sort of training is needed in a particular situation but they have little opportunity to make a complete survey of the methods and techniques which may be applicable, and on the basis of such a survey to select the ones which give promise of best results. The central training unit has an opportunity, moreover, to conduct research in developing improved methods of evaluating training activities. The search for new and better techniques should not be confined to the jurisdiction

served by any training unit. Much can be learned from the work done in other public service jurisdictions and in industry, business, and education, both vocational and general.

Research in the field of training is not the obligation of any one person or group, but should be carried out to some extent by all who have any training responsibility. The central training unit, however, is best located and should be best equipped to carry on the most extensive of the research activities in this field. There is need for research in materials and equipment as well as in methods and techniques.

Research is essential in any dynamic and progressive organization. It should not be limited merely to the gathering and organization of facts concerning what has already been done. It is true that we learn much from the experience of others, and that very frequently that experience serves our own purposes adequately. A portion of the burden of research, however, should be to analyze critically the problems which need solution, and to analyze the various solutions which thus far have been used in order to determine whether they are as effective as they should be and in order to point out the needs for improvement. The progressive factor in research is the discovery or invention of new methods or a new combination of old methods which may better meet the needs of a situation than anything which has been previously attempted. Each problem must be studied in the light of its own elements and the solution of that problem must be individually worked out on the basis of the best that is known or can be devised.

Informational Service

Thus far we have considered only the fact-gathering functions of the central training unit. It is obvious that the purpose of gathering information is to make it available or actively to distribute it. Some training units maintain not only a central library, including published texts and relevant periodicals, but also a file which readily reveals information concerning programs, materials, and methods that have proved effective in relation to definite employee training problems.

This information serves not only as the source file of the unit's training specialists, supplying them with adequate and up-to-date information needed in the performance of their advisory functions, but is also available for consultation by persons outside the unit.

The central training unit should maintain and be in a position to distribute information with respect to the facilities available to public employees in educational and similar outside institutions. It is appropriate that information concerning these facilities be assembled and kept by the central training unit, for the development of a well-rounded program of training for the employees in a given jurisdiction or organization very likely will require the assistance, when it can be secured, of outside educational institutions.

In some jurisdictions, it is found helpful to publish a bulletin to disseminate information concerning training activities, materials, or methods. Such bulletins are prepared, for example, by training units in the United States Department of Agriculture and the Federal Bureau of Employment Security.

Preparation of Training Texts

The central training unit may also find it desirable to prepare course materials, exercises, or manuals for use within the organization or jurisdiction it serves. Practice exercises in stenography and typing and orientation course material, including information concerning personnel policies and practices, are illustrative of the type of information and materials which can be prepared by a central training unit.

Advice and Counsel

One of the most important functions performed by many central training units, particularly those in large and complex organizations, is that of giving advice and counsel to executive and administrative officers, personnel directors, operating supervisors, and the training specialists attached to subordinate organizational subdivisions. A training consultant, for example, in the Bureau of Training of the New York City Civil Service Com-

mission, would be expected to advise and consult with training officers in the various departments of the city government. Similarly, members of the Training Division of the United States Department of Agriculture are expected to advise and consult with members of training sections of the various bureaus of the Department. The State Education Department in New York performs a number of centralized functions with relation to the training of state employees:

The primary responsibility of the Department is to aid in the operation, development, and coordination of basic in-service job training programs for state and local employees. The Department will also observe closely the problems of, and developments in, pre-employment training for the public service. The Department will adjust its activities to meet the impact of pre-employment training results upon the in-service training field. It will provide advisory aid to such programs in order to mesh pre-employment and in-service training. (Reference No. 49, p. 12.)

In general, such advice and counsel has to do with analyzing training needs; planning and developing training programs; selecting methods and materials to be used; selecting instructors and methods of instruction; and establishing methods of appraising the results of specific instruction, training materials, or entire training programs. Of all the advisory service performed by a training officer the most far-reaching in its results is that rendered the administrative head of his organization. The training officer's counsel and advice in planning the means by which the effectiveness and morale of employees may be increased can be a vital force in insuring organizational success.

The value of such advice and counsel, especially to those who are more immediately charged with the responsibility for developing specific training courses or projects, is derived from the breadth of experience and contact which is cumulatively developed in a central training unit. If the fact-gathering and research activities of the unit are effective, the consultants have the means of supplementing their own observations and experience readily and authoritatively and are thus enabled to supplement the knowledge and experience of local training officers to an extent that would otherwise be impossible.

It seems essential that consultants and technicians in the central training units of large jurisdictions should be persons of broad experience and of penetrating and analytical intelligence, who are neither unduly committed to, nor prejudiced against, any specific methods or techniques. Their task is that of the scientist who must make sure that he has all the facts and details of a problem before attempting to give advice as to its solution. Every element in a training project should be determined only after the circumstances and needs have been completely examined. The consultant from a central training unit who attempts to prescribe the courses or materials or methods to be used in any situation without first making sure that he has at his command an adequate analysis of the skills, knowledge, and operations required in the job for which training is to be given, as well as information concerning the degree to which such skills and knowledge are already possessed by the employees whom it is proposed to train, will soon lose the confidence of the persons he attempts to advise.

Under the heading of advice and counsel may also be included personal assistance and guidance offered to individual employees in planning their own educational and training activities. This type of counseling may or may not be officially included among the announced duties of a central training unit; there may be personnel specialists, not attached to the training unit, whose function it is to include this among other personnel relations and guidance functions. In any event, the training unit, if it wins the confidence and support of the organization as a whole, will be sought out by individual employees and officials for just this kind of help. It is most appropriate that this should be so, especially if it is agreed that training and education have a highly personalized aspect and that it is profitable to think in terms of individual growth as well as organizational effectiveness.

Direct Assistance and Cooperation

Very frequently the central training staff is called upon not only to assist in the analysis of training needs, the making of

training plans, and the selection of methods and materials to be used, but also to participate actively with local training officers or with supervisors in actually putting training projects into operation. This direct assistance may be exercised at any point in the development of a training activity and may concern the entire activity, or only a portion of it. Central training officers may be cooperating participants with supervisors and other specialists in planning a course and in giving actual instruction. For example, a series of training conferences for supervisors or foremen in a given department might be planned with the assistance of a consultant from a central training unit who had had wide experience in supervisory training. Most of the actual instruction or conference leadership might be provided by specialists in personnel management, office management, and other functions of the organization, but the representative of the central training unit might himself participate in the conference or act as leader at certain sessions.

The central training unit can be of direct assistance to local training officers and to supervisors in negotiating with outside institutions to secure their cooperation in providing facilities or instruction for training which cannot be completely provided within the organization. In Chapter III the importance of such cooperation has been stressed. It is likely to be facilitated and made more generally applicable to the training needs of an entire public service jurisdiction if the central training unit of that jurisdiction undertakes the responsibility of coordinating these activities and assists in making arrangements which will best serve the entire jurisdiction.

In this report stress has been laid upon the desirability of utilizing the services of operating supervisors for training purposes. Note has also been made of the fact that many such supervisors who may be unusually competent in the technical work of their units may have had no training or experience as instructors. Some may not have the natural ability to convey information successfully to others, which is basically essential in any instructional process. Members of the central training unit may be of great assistance in preparing such supervisors to under-

take the teaching responsibilities which are inherent in their work. The central training unit not only may be called upon to train line supervisors to be instructors, but also may be required to give centralized courses for training technicians in the various departments and agencies within the jurisdiction. This training should include instruction in the principles of adult education as applied to employee training situations, in techniques and methods applicable under a variety of circumstances, in the effective use of various types of materials, in the analysis of training problems, in the formulation and development of training programs, and in the processes and methods of evaluation.

Coordination of Training Activities

The central training unit of any large and complex organization is in a position to discover instances in which several organizational branches have the same or similar training problems, while none of them alone is in a position to set up the necessary training facilities. With assistance and advice, however, it may be possible for all of them to be brought to cooperate in setting up a program which may meet their several needs.

Training committees can be of great assistance in the coordination of the training activities within an organization, as well as in planning and organizing training programs. Where central training units do not exist, there can hardly be coordination except through the service of intergroup committees. Where central training units do exist, their coordinating function is greatly facilitated by the active cooperation of committees, either those set up within organizational subdivisions, or those whose membership is made up of representatives of such subdivisions. In a municipal plan, for example, a central advisory committee may assist the division or bureau of training in planning and coordinating the activities of all city departments. Such a committee would be made up, in all probability, of representatives of the several departments. In addition to, or in place of, such a central committee, there may be depart-

mental training committees, concerned primarily with planning and developing training programs within their own departments but serving also to assist the central bureau or division of training in coordinating the training activities of the entire service.⁵

This coordination of the activities of several departments or organizational subdivisions may in certain instances involve the participation of outside educational or other institutions, a matter which has already been mentioned. The availability of funds under the George-Deen Act should not be overlooked by central training units operating in localities where arrangements can be made for the use of such funds. The closest of relations should, and usually do, exist between central training units at state and municipal levels on the one hand and state boards of vocational education and institutions authorized to receive George-Deen Act funds on the other. Departments and agencies of the federal government have frequently called upon the Office of Education for assistance and advice in the development of training plans or activities. Intimate cooperative re-

⁵In the Tennessee Valley Authority departmental training committees have been organized on both a formal and an informal basis.

These committees cooperate with the Division of Training of the Personnel Department. Duties recommended for them have been stated as follows by a member of the Training Division:

1. To determine the training needs of the department
 - (a) Identify those needs which are sufficiently common to all to justify the formation of classes.
 - (b) Identify the needs of individuals or small numbers of persons which may be approached through individual study.
 - (c) Identify the lines of promotion so that each individual may clearly see, not only the requirements essential for his present position, but also those for which he may be able to prepare himself. This suggestion implies that the training needs should not be confined to departmental lines.
2. To determine the content and scope of the courses planned, select the instructors, and to evaluate the quality of the instruction that is given.
3. To assume responsibility for keeping the instruction in line with the policies of the department.
4. To assist in the induction and orientation of new employees.
5. To assist in the planning and organization of training programs for the persons employed as interns, assistants, and student engineers.

The Training Bureau of the New York City Civil Service Commission is assisted by two advisory bodies, one an Advisory Committee composed of departmental training officers, and the other an Advisory Council made up of educational, industrial, and governmental personnel specialists. Committees serving similar purposes are set up in other public service jurisdictions and may often serve not only in an advisory capacity in the planning of training programs but also in the coordination of activities.

lationshps are being developed between the United States Civil Service Commission and the Office of Education to the end that the great resources of the educational world, and specifically the facilities of educational systems and institutions, may be brought to contribute most effectively to the development of public service training at the federal level as well as in other jurisdictions. The functions of the Office of Education in relation to the administration of the George-Deen Act have been described in Chapter III.

Direct Instruction

Many central training units are called upon to carry through from beginning to end certain types of employee training. In some cases direct instruction is the major function of the unit. Other training units give little or no formal instruction, but instead concentrate on functions of an advisory and facilitating nature. The appropriate balance between instruction by training officers and by other means, varying with changing circumstances, has been discussed in Chapter III.

Evaluation

Under certain circumstances the responsibility for direct evaluation rests upon the central training unit. Training specialists may be required by administrative authorities to evaluate and report upon any and all aspects of employee training carried on within an organization. The subject of evaluation of the effectiveness of training activities has been discussed thoroughly in Chapter VI.

Standardization

Standardization is not applicable or desirable in many situations, but in others it is practically imperative. In the training given to supervisors in connection with service rating systems, for instance, it is highly important that standardization should be established in order that there may be uniformity in the rating process itself. It is also important that proper and uniform standards be established, through training, in the field of

position classification, and in similar procedures common to the various units of a jurisdiction.

Recording Participation and Determining Credits

The practice of recording the training participated in by individual employees is a sound one that unfortunately is all too often neglected. Frequently this neglect can be ascribed to the fact that personnel service records are not designed to include information concerning education and training completed after appointment. In some jurisdictions provision has been made for including in an employee's record information concerning his participation in training given under the auspices of the organization and jurisdiction itself. Frequently no such record is made of educational or training courses taken under other auspices.

In the Home Owners' Loan Corporation the burden of responsibility for reporting information of this type is placed largely upon the shoulders of the employee. He is expected to notify the personnel officer whenever he has had additional training which may serve to increase the consideration which may be given him for transfer or promotion. In his personnel folder, a special sheet is maintained for recording his personal history subsequent to the date of his original appointment, including entries he submits. In addition to the information supplied by the employee himself, the personnel office receives information from instructors of courses sponsored by the organization.

The Tennessee Valley Authority uses a manual entitled "The Problem and Procedure of Training Participation Reports," (Reference No. 44) which discusses the reasons for training reports, their definition, contents, and form. The method of evaluating an employee's participation, as well as the procedure to be followed in making reports, is prescribed. The summary is quoted in full:

1. A participation report is defined as a certification of skill or knowledge obtained through participation in an organized educational activity.

2. A participation report is offered for participation in any organized general education, in-service training, or job training activity, in which the participation can be and is evaluated in qualitative terms, and only for such activities.

3. A participation report is not offered for participation in related class work undertaken under a formalized plan of work-experience and training. At present, this applies to apprentice training and student generating plant operator training.

4. The participation report contains:

- a. Name of participant
- b. Title of activity
- c. Date begun
- d. Date ended
- e. Total number of hours of instruction
- f. Subject contents of activity
- g. Methods of instruction
- h. Evaluation of participation
- i. Name of instructor (signature if desired)
- j. Signature of unit supervisor

5. The evaluation is indicated on a two-point scale—satisfactory and unsatisfactory—with comments in sentence form to provide more searching evaluation.

6. The evaluation should be as objective as possible. For this purpose, it is to be based on written tests, reports, or performance tests.

7. Participants are allowed the option of deciding whether participation reports should be sent to their files and their supervisors.

8. Exercise of this option is to be permitted after the close of the activity and after the participant has reviewed the evaluation of his participation.

9. Unit supervisors are responsible for obtaining evaluations from instructors and for preparation and distribution of participation reports.

10. The Administrative Assistant administers the use of participation reports. He reviews all reports before filing.

11. The attached forms are adopted as uniform throughout the Training Division.

In other organizations attempts have been made periodically to secure up-to-date information concerning the education and training acquired by employees since their original appointment or since the last similar inquiry was conducted. The questionnaire method usually is employed for securing this information.

In June, 1938, the United States Department of Agriculture sent questionnaires to employees throughout its departmental and field services. The information requested was varied and detailed, and it included education completed, not only before employment, but subsequently. The information on these questionnaires was coded and punched on tabulating cards maintained primarily for transfer and promotional purposes. These punch card records are being brought up to date annually by means of further questionnaires.

In a number of jurisdictions it is the practice to award employees formal credits toward promotion for taking part in training courses. Until and unless there is adequate and trustworthy evaluation of training given, the practice of allowing credits of this kind is fraught with a good deal of danger. Experience and research thus far concluded indicate that there is more danger than value in allowing credits toward promotion solely on the basis of satisfactory completion of courses of training. Eligibility for admission to a promotion examination may be, in part, determined by such credits, but the actual contribution made by training to the qualifications of an employee cannot be taken for granted and should be measured by an adequate examination in the specific knowledge and skills required in the position to which it is proposed that the employee be promoted.

Maintaining Relations with Outside Agencies or Institutions

Mention has been made of the services that are performed by many central training units in coordinating the training activities of governmental units with outside educational agencies. There are three other objectives which a central training unit may serve by maintaining close relationships with outside organizations, both public and private: first, to assist in connection with preentry education or training; second, to promote the development of facilities which will afford public employees the opportunity, on their own initiative, to pursue their general education while employed, whether or not the particular subjects they choose to study are directly related to their official

occupation; and third, to obtain the most recent information and advice with respect to the development of materials, methods, and standards that may be applicable to problems of employee training.

The first type of relationship is one which, if entered into with a thoroughly professional and tactful attitude, may serve to assist educational institutions to understand more fully those requirements of the public service which they are called upon to aid prospective government employees in meeting. Any thorough-going analysis of the training needs connected with any position or group of positions can hardly fail to reveal in many instances the desirability of some differing emphasis in, or additions to, preemployment education. Educators generally have welcomed reliable information of this kind. Lest there be any fear, however, that public officials are here being encouraged to attempt to bring unwarranted influence to bear upon the educational plans of nongovernmental institutions, it should be vigorously emphasized that this is not the case.

Strictly speaking, the central training unit is officially interested only in educational experiences which contribute directly to the effectiveness of the agency's operations. Although the general cultural advancement and the pleasure derived from studious pursuits may indirectly increase the value of employees to the government and may give them a high degree of personal satisfaction, the government could not without specific legal authorization bear the expense of conducting courses primarily for the employees' benefit, even if it were considered advisable. A discussion of employee training, however, cannot be considered complete without touching, even though lightly, upon the employees' opportunities for self-development. Personnel officers and members of the central training units can well give some thought and attention to this aspect of employee education and can frequently stimulate the interest of favorably located educational institutions in making suitable courses available to government employees at times when they are free to attend them. A few universities have already done a great deal in this field and others are rapidly

becoming aware of the opportunity they have to serve public employees.

Universities and colleges are constantly pursuing research with which training officers will do well to keep in touch. Information concerning methods of instruction and information and material for various courses frequently can be obtained better from certain educational institutions than from any other source. Studies that are being made under the auspices of educational foundations frequently yield information of great value to those whose responsibility it is to train public employees.

Stimulation of Interest in Training

Many of the most obviously desirable things in life need "selling," although it may seem that their evident benefits would make them sought by all. The necessity for training and the advantages derived from it have constantly to be put before administrative officials, legislative bodies, budget officers, and employees themselves. Frequently it is necessary to induce officials and supervisors to train their employees. The lion's share of this educative and promotional activity falls upon the central training unit.

Often there is need for clarification with respect to the meaning of the term "training." Many persons in responsible positions are inclined to misunderstand its purposes and underestimate its value to them because they visualize it as something quite apart from the administrative or management function, rather than as one of its most vitally important tools. An inquiry was made of a government official with respect to training activities being carried on in the highly professionalized organization with which he was connected. He replied that no training was being done. Careful questioning, however, drew out the information that when young engineers were appointed in the organization they were assigned in groups of two or three to senior engineers who were best equipped to get them properly instructed in the procedures, standards, and specialized type of problems existing in the organization.

That official had not labeled that process of instruction as

"training." Presumably he felt that an activity, to qualify as training, had to be separate and apart from regular necessary processes of administration and would require classes, special instructors, and all the paraphernalia of the schoolroom. It is essential that those who would further the cause of employee training should themselves view it in its true light—as a vital part of administration—and should clarify the thinking of others on this point.

No one is in a better position than the central training unit to collect and disseminate reliable information, both statistical and anecdotal, about training activities and their effectiveness in improving employee operations and morale. The successful experience of other organizations or jurisdictions, the savings in time, money, and effort as a result of specific training projects, the enthusiastic testimony of other well-known administrators or executives, all provide strong support for the person who is seeking to convince his superiors, or those who hold the purse strings, that some training program should be initiated.

Another way in which support for training can be gained is by surveying carefully the operations of an organization, revealing and demonstrating weaknesses and inefficiencies that can be readily corrected by the appropriate kind of training, and then proposing a well-planned program to improve skills, supply lacking knowledge, and correct weaknesses in procedure and operations.

Once support has been won for the inauguration of a program to accomplish a definite purpose in relation to a revealed need, and that program has been carried through to a successful conclusion, its demonstrated results in improved operating effectiveness pave the way for the development of more extensive training plans.

By taking operating supervisors and administrative officials into complete partnership in analyzing training needs and in working out the solutions of operating problems in terms of training projects, the training specialist or central training unit is able to gain a degree of confidence, support, and assistance that is difficult, if not impossible, to achieve by other means.

If a person can be brought to participate actively in any undertaking it will almost invariably have his approval and usually his loyal and enthusiastic support.

In almost every undertaking that deeply affects the activities of an organization, the degree of success attained is likely to be in direct proportion to the measure of interest, support, and participation of the top executive and those responsible to him for carrying out major policies. The central training unit's first consideration, as far as the promotion of its own activities is concerned, should be to give these officials all the information and assistance necessary to an adequate understanding of what training is and does, and of their part in its development.

As other sections of this report have emphasized, the training specialist cannot stop with administrators and supervisors in this campaign of promotion. If the line employee gets the impression that this training is just another device of management and efficiency experts to get more work out of him, the whole program will miss fire and perhaps do more harm than good. Training must be accepted by the learner; he must participate actively and cooperatively if desirable results are to be attained.

The central training unit in a public service jurisdiction cannot afford to neglect the general public and legislative bodies in this informational or promotional activity. Much of the same material which is prepared for presentation to high administrative officials and budget officers is appropriate for general publication and for submission to legislative committees. Well-prepared factual data, which reveal specific contributions by well-organized training programs to improvement in the operating effectiveness of groups of employees or whole organizations, can be used appropriately and effectively in seeking public and official support for organized training activities.⁶

ORGANIZATIONAL RELATIONSHIPS

At the outset of this discussion the statement was made that the training of employees is the direct responsibility of administrators and supervisors. As consideration of the many types of

⁶See the report of the Committee on Public Relations, a companion report in this series.

training has progressed, however, it has been found that specialists both inside and outside the structure of an organization have in many instances borne a very large share in the planning and execution of training programs. This chapter deals with a unit especially set up for that purpose. It might seem that the existence of such a unit conflicts with the original premise. Otherwise, how can it be said that supervisors are responsible for training, and at the same time have a special unit organized for the purpose of planning or conducting it?

No real conflict is present in this situation. A central training unit is responsible either directly or through an intermediate step to the chief administrative official of the organization or organizational subdivision to which it is attached and which it serves. The nature of the relationship to administrative management differs in different jurisdictions and organizations. In some instances, as has been noted, training has been regarded as an independent function of administration and has not been grouped with other related functions under the immediate direction and control of an official reporting to the administrative head of the agency. In others, such a grouping has been made and training has become one of the specialized functions under the immediate administrative direction of a high-ranking official who reports either directly to the chief executive or to someone in his immediate office.

Many administrators and persons interested in the development of employee training have felt strongly that centralized training functions should be included with other functions concerned with the activities and abilities of employees. This tendency has led to a change in the conception of the scope and importance of the activities of the departmental personnel office or the central personnel agency. In numerous instances their functions were limited for many years to the recruitment and selection of personnel, to the maintenance of records, and to the administration of classification and pay plans. There has been an increasing tendency in recent years, however, to add to these control functions services of a very different character. Among the latter, training is taking a place of conspicuous

importance. This assumes, of course, several prerequisites: a demonstrated need, sanction of the agency's participation, and available staff and facilities.

The appropriateness of including training among personnel functions rests upon the close relationship which exists among them. The interrelationship between selection of personnel and training is self-evident. In the first place, the examiner and placement officer need to know in great detail the training an applicant has had before entrance into the public service. In the second place, the supervisor or training officer must have the same information in order intelligently to plan the training which is still necessary after appointment. Similarly, there is a close relation between the classification function and the training function. The analysis of duties and responsibilities made for the purpose of determining the classification of an employee's position is closely related to analysis made to determine the content of a training program. Such an analysis is useful, once again, to the examiner who seeks to select well-qualified persons. Training is linked closely also with the personnel functions of promotion and transfer, especially since training projects frequently are set up for the particular purpose of preparing employees for the performance of different or more responsible duties.

A notable step taken officially to associate training with other personnel activities was the signing by President Roosevelt of Executive Order No. 7916 on June 24, 1938. This order, which has been cited elsewhere in this report, placed upon personnel officers certain definite responsibilities for the training of federal employees. In section 6 of that order, training was enumerated among the functions specifically assigned to directors of the departmental divisions of personnel supervision and management, whose appointment was authorized and directed by the order. In section 8, the United States Civil Service Commission, the central personnel agency of the federal government, was directed in the following words to assume for the first time an important role in connection with training employees of the federal government:

The Civil Service Commission shall, in cooperation with operating departments and establishments, the Office of Education, and public and private institutions of learning, establish practical training courses for employees in the departmental and field services of the classified civil service, and may by regulations provide credits in transfer and promotion examinations for satisfactory completion of one or more of such training courses.

In preparation for the assumption of its new responsibilities, the United States Civil Service Commission issued a statement setting forth its proposed activities, from which the following citations are quoted:

These two sections of the order (Section 6 and Section 8 mentioned above), taken together, give broad general directions for the establishment and development of the Federal training program. Section 6 appropriately places upon the administrative heads of the several departments or agencies the responsibility for providing adequate training for the employees under their own direction, and provides that their directors of personnel shall initiate and supervise training programs which they, the administrative heads, after consultation with the Civil Service Commission, approve. Section 8 places upon the Civil Service Commission a much broader responsibility than that implied in the "consultation" mentioned in Section 6. It provides that the Commission shall, with the cooperation of the agencies and institutions mentioned, establish training courses for departmental and field employees of the classified civil service. Then, in the last clause, it authorizes the Commission, but does not direct it, to establish regulations for providing a system of credits to be available in transfer and promotion examinations of those who have satisfactorily completed such training courses.

The Commission interprets the first part of Section 8 to mean that it is expected to assume a responsibility for assuring that necessary training courses are established to meet the needs of the Federal service. Such courses may be made available in three ways, first, within and under the direction of the separate departments and agencies for the benefit of their own employees, second, by the coordination of the activities of different agencies or institutions whenever cooperative action is necessary or advisable, and third, by the initiation and direction of certain types of training courses by the Civil Service Commission itself. (Reference No. 46, pp. 2-3.)

Much of the necessary training and instruction in any organization will always be given directly by line supervisors to their subordinates. It is clear, however, that there is need for the assistance

of specialists, who are themselves experienced in training methods, to aid line supervisors in planning, conducting, and appraising such instruction, and to organize and direct courses which cross lines of supervisory jurisdiction. The responsibility for providing such leadership, assistance, and supervision in training within establishments is placed upon the personnel directors thereof, who will be assisted by staff training officers, equipped to initiate and direct the more usual training activities within their agencies. But expert consultants, specialized and experienced in particular areas of instruction or in the application of certain methods and techniques, will be needed to advise and assist them. In order to render this advice and assistance, the Division of Training in the Commission will maintain a staff of training consultants under the direction of a chief training consultant who will be a man widely recognized as an expert in the field of employee training. He will be assisted by, and direct the activities of, a group of senior training consultants and associate training specialists. This staff will be available for consultation concerning any training problems, and it is expected that its members will establish close liaison between the Division of Training in the Commission and the Federal departments and agencies. (Reference No. 46, pp. 8-10.)

These two quotations, and especially the second, set forth contemplated relationships, with respect to the training of employees, between central training units at the several organizational levels within the federal government and operating supervisors. One type of responsibility is shown to rest with line officials, another type with the departmental directors of personnel and their staffs of training specialists, and another at the service-wide level with the United States Civil Service Commission and its Division of Training.

As has been brought out earlier in this chapter, the Bureau of Training of New York City's Civil Service Commission has the assistance of an advisory committee composed of departmental training officers and an advisory council made up of educational, industrial, and governmental personnel specialists. Here again is a linking of the operating responsibility for training with parallel responsibility in the form of contribution of personnel specialists. At the state level in New York, however, the initiative has been taken by the Education Department in providing centralized services which may be made available

not only to state employees but also to city, village, county and town employees. The functions proposed for the State Education Department, as set forth in the University of the State of New York Bulletin of May 16, 1938, are as follows:

a. To be a service agency for interested public, quasi-public and private agencies in the operation, development and coordination of sound training programs for state and local employees by providing general advisory assistance, aiding in the development of curriculums, teacher-training programs and teaching materials, providing teacher-training service and acting as a clearinghouse of information making available to interested groups throughout the country the in-service training experience of New York State and apprising agencies within the state of in-service training developments in the state and nation.

b. To cooperate with public, quasi-public and private agencies in extending the scope and usefulness of existing training programs and establishing programs for officials for whom no training has heretofore been provided.

c. To encourage the growth of in-service training programs initiated, sponsored, directed and supported by public employees in order to stimulate and maintain effective interest in employee self-improvement.

d. To assist in the development of public employees as instructors in training programs.

e. To assist in the coordination of all public in-service training activities within the state and to work with all interested agencies for the elimination of overlapping and duplication of training effort. To prevent a ragged, piecemeal development of in-service training programs which would result in an uncoordinated, ineffective and costly maze of overlapping training activity, confusing to public employees and citizens alike, the Department will seek to be identified with every sound public in-service training program.

f. To assist in promoting economy in the administration of public in-service training programs by urging and aiding all agencies to achieve full cooperative utilization of rich existing public and private training facilities and resources.

It is apparent that these functions parallel those which might be performed for state agencies by a central training unit organized under the State Civil Service Department. It is evidently contemplated that the Education Department shall supplement activities which may be undertaken by civil service commissions, since on page 17 of the report it is stated that:

Local civil service commissions and departmental personnel officers can and should be important factors in the development and operation of in-service training programs.

The local civil service commission can inaugurate training programs and act as a municipal training coordinator. Possessing detailed information on job duties and career requirements, it can render valuable aid in drafting appropriate courses of study. It can stimulate employee interest in training by granting credits on service ratings for successful attendance at training schools.⁷

Department personnel officers are likewise equipped to make important contributions to in-service training programs.

Since the passage of the George-Deen Act the boards for vocational education in other states have undertaken to exercise similar leadership in the establishment and sound development of training programs. Among these states may be mentioned Michigan, Arkansas, Oklahoma, Texas, California, Pennsylvania, and Virginia. The functions performed by the boards of vocational education in these states are in many respects identical to those that have been described as appropriate for central training units. In fact, in the absence of any provision for other types of central training units to serve the needs of state employees, these state boards can be said to be acting as central training units.

The United States Office of Education and the state boards for vocational education, however, render services and perform functions that are not included among those appropriate for central training units as defined in this report. Since they are charged with responsibilities that touch upon all aspects of the broad subject of education within their jurisdictions, employee training is but one of their many interests, even in the field of vocational education. They approach training problems from outside the zone of direct administrative authority, while a central training unit, as we have defined it, is directly attached and completely responsible to the administrative authority of the particular organizational unit which it serves.

What has been said about the function of state boards of voca-

⁷The soundness of the practice of giving credits on service ratings for attendance at training courses is challenged by many personnel men and training specialists.

tional education in providing central training services to state and local governments applies in some measure, but not so directly, to the training activities of educational institutions, of professional organizations, of public officials, and of public employee organizations.

Although none of the organizations cited is an adequate substitute for the central training unit established by the government agency itself, they are almost indispensable to the small government jurisdiction which does not have a training problem of sufficient magnitude to justify the employment of even a single person to assume full-time training responsibilities. Through their state leagues of municipalities, these cities are securing, on a cooperative basis, the central training services of state boards for vocational education, educational institutions, and professional organizations, in much the same way as they cooperate on the purchasing of supplies, the provision of technical personnel services, and other activities.

One institution in Washington occupies a unique relationship to employee training in the federal government. It is the Graduate School of the Department of Agriculture, organized in 1921 with the approval of the Secretary of Agriculture for the benefit of employees of the department and such others as might be qualified to participate in the courses offered. At the outset the purpose was mainly to offer opportunities for advanced study at the post-graduate level in scientific fields but the demands for the introduction of other courses have in many instances been heeded so that the most recent announcement lists approximately two hundred courses, seminars, and lecture series in many general fields including accounting, botany, chemistry, clerical and secretarial, economics, engineering, graphic presentation, history, languages, statistics, management, soil conservation, extension education, minerology, psychology, social and legal problems, speech and writing, and sociology.

The Graduate School is under the general supervision of the Director of Personnel who is chairman of a Board of Administration, consisting of several bureau chiefs and others, which meets at least quarterly to consider policy and program ques-

tions. The School is administered by a Director. Although its position with relation to employee training has been much more analogous to that of an educational institution outside the government structure than to that of a central training unit as we have defined it, especially since its facilities are available to all properly qualified federal employees on an out-of-hour, fee basis, it does perform certain important centralized training functions which contribute directly and effectively to the increased efficiency of the employees within the Department. The Department is taking steps to increase this contribution, and an integrated relationship with the training program of the Office of Personnel is now being developed.

CONCLUSION

Centralized training functions of many types are being performed in a number of jurisdictions and in many organizations. In some circumstances, as we have seen, they are being carried on by groups of training specialists attached to civil service commissions or under the administrative supervision of directors of personnel. In others, they have been delegated to, or assumed by, individuals or groups that are not a part of the machinery of personnel administration. In the survey which furnished data for this report it was revealed that in several jurisdictions it has been recognized and recommended that the civil service commissions or personnel officers should have certain definite responsibilities for in-service training which thus far they have been unable, for one reason or another, to assume.

In some localities there is evidence of a tendency to avoid any union of training activities with the personnel functions currently being performed. It may perhaps be fairly said that this tendency is the manifestation of certain attitudes between personnel officers and operating officials that have developed out of the nature and limited scope of the personnel activities thus far carried on in those localities. Where civil service commissions or personnel departments or divisions have been concerned almost exclusively with conducting examinations, establishing pay scales, keeping records, and enforcing regulations, and where

there has been a consequent aloofness on the part of personnel officers from the operating problems of an organization or jurisdiction, there is an easily understandable feeling on the part of administrative officials that employee training should be entrusted to other hands.

It is quite apparent that the pressing need for the organized training of certain groups of personnel, notably those in the uniformed city services, has stimulated the development of locally centralized programs long before progress in providing adequate personnel administration has reached a point where leadership could be expected from that source. It is equally evident that, where steps are being taken, or are contemplated, to strengthen the civil service and to broaden the scope of personnel administration in general, there has been an increasing tendency throughout the public service to place central responsibility for planning, initiating, and supervising training programs in a specialist or group of specialists attached to the central personnel agency.

This tendency is logical, but it is clear that leadership in training activities must be entrusted to persons who are not only fully aware of the importance of such activities but who are also thoroughly competent to plan and administer the type of program which will command the enthusiastic and participating support of department heads and operating supervisors. This means that civil service commissions and personnel directors, if training is to be included among the recognized functions of personnel administration, must include on their staffs experienced training specialists who are capable of winning the confidence and cooperation of supervisors and employees and are thoroughly competent to exercise the functions discussed here.

Bibliography and References¹

1. ADAMS, O. D. *Training for the Police Service*. U. S. Office of Education (Bulletin No. 197, Trade and Industrial Series No. 56), 1938, 84 pp.
2. AMERICAN MUNICIPAL ASSOCIATION. *Toward Competent Government*. Chicago, 1936, 39 pp.
3. APPLEY, L. A. *The Foreman's Place in an Employee Educational Program* (Personnel Series No. 33). New York: American Management Association, 1938, pp. 24-34.
4. BAUMGARTNER, L. *Experience in Staff Education for the New York City Department of Health* (Unpublished).
5. BECKMAN, R. O. *How to Train Supervisors*. New York: Harper, 1940.
6. BERGEN, H. B. and BERGEN, G. L. *Executive Training Programs* (General Management Series No. 107). New York: American Management Association, 1929.
7. BROOKS, EARL. *In-Service Training of Federal Employees*. Chicago: Civil Service Assembly, 1938, 67 pp.
8. BUNBURY, SIR HENRY N. *Governmental Planning Machinery*. Chicago: Public Administration Service, 1939, No. 63, 25 pp.
9. CHARTERS, W. W. and WHITLEY, I. B. *An Analysis of Secretarial Duties and Traits*. Baltimore: Williams and Wilkins Co., 1924, 186 pp.
10. CULVER, D. C. *Training for Public Service: A Bibliography*. Berkeley: University of California, 1937.
11. CUSHMAN, FRANK. *Foremanship and Supervision: A Practical Handbook for Foreman Conference Leaders and Supervisors of Vocational Education*. New York: John Wiley and Sons, 1938, Revised, 275 pp.
12. CUSHMAN, FRANK. *Training Procedure*. New York: John Wiley and Sons, 1940.
13. CUSHMAN, FRANK. *Vocational Training for Firemen*. U. S. Office of Education, Vocational Division (Bulletin No. 199), 1939, 36 pp.
14. DEVINE, J. E. *Films as an Aid in Training Public Employees*. New York: Social Science Research Council, 1937, 114 pp.

¹This bibliography contains the publications referred to by number in the text and a small group of additional publications judged by the Committee to be particularly useful.

170 *Employee Training in the Public Service*

15. DEVINE, J. E. *Postentry Training in the Federal Service*. Chicago: University of Chicago, 1935, 73 pp.
16. ELLIOTT, H. S. *The Process of Group Thinking*. New York: Association Press, 1932.
17. GATES, A. B. "A Review and Evaluation of Supervisory Training Experience." *Personnel and General Management Papers*, of the Seventh International Management Congress. Baltimore: Waverly Press, 1938, pp. 69-73.
18. GREENE, J. H. *Organized Training in Business*. New York: Harper, 1937, Revised, 350 pp.
19. HALL, MILTON. "Training for Effective Letter Writing." *Proceedings of the Thirtieth Annual Meeting of the Civil Service Assembly of the United States and Canada*, 1938, pp. 54-57.
20. HALL, MILTON. *Training Your Employees: Suggestions to Executives and Supervisors*. Washington, D. C.: Society for Personnel Administration, 1940, 26 pp.
21. HACKETT, J. D. *Labor Management*. New York: Appleton, 1929.
22. HAWKE, J. R. *Training for the Public Service Occupations*. U. S. Office of Education (Vocational Education Bulletin No. 192), 1935, 81 pp.
23. KENAGY, H. G. "The Technique of Training on the Job." *Handbook of Business Administration*. New York: McGraw-Hill, 1931, pp. 1216-1230.
24. LAMBIE, M. B. *Training for the Public Service*. Chicago: Public Administration Service, 1935, No. 49, 49 pp.
25. LEIGH, R. D. *Group Leadership*. New York: Norton, 1936.
26. MELTON, P. W. "Training Public Employees." *Personnel Journal*, Vol. 16, June 1937, pp. 65-69.
27. MERIAM, LEWIS. *Public Service and Special Training*. Chicago: University of Chicago, 1936, 83 pp.
28. MOORE, L. S. "Training for Public Service." *Occupations*, October, 1939, pp. 32-37.
29. MOSHER, W. E. and KINGSLEY, J. D. *Public Personnel Administration*. New York: Harper, 1936. Chapter 13.
30. NATIONAL INDUSTRIAL CONFERENCE BOARD. *Training Solutions of Company Problems*. (Studies in Personnel Policy No. 15.) New York, 1939.
31. NATIONAL INDUSTRIAL CONFERENCE BOARD. *Training Solutions of Company Problems*. (Studies in Personnel Policy No. 18.) New York, 1940.
32. NEW YORK CITY CIVIL SERVICE COMMISSION. *Training New York's Employees*, 1940.

33. NEW YORK STATE. *Training in the Public Service in New York State: Programs and Policies*. Albany: University of the State of New York, 1938.
34. PEFFER, NATHANIEL. *Educational Experiments in Industry*. New York: Macmillan, 1932, 207 pp.
35. PENNSYLVANIA DEPARTMENT OF LABOR AND INDUSTRY, DIVISION OF UNEMPLOYMENT COMPENSATION AND EMPLOYMENT SERVICE. *Report on Training Principles and Program*. Harrisburg, 1939, 23 pp.
36. RANKIN, A. C. "A Survey of Employee Handbooks." *Personnel Administration*, Vol. 2, February 1940, pp. 8-11.
37. RIDLEY, C. E. and SIMON, H. *Measuring Municipal Activities*. Chicago: International City Managers' Association, 1939.
38. SEAY, M. F. *Adult Education* (A Description of the Educational and Training Program of the T.V.A.). Lexington: University of Kentucky, June 1938, Vol. 10, No. 4, 192 pp.
39. STAHL, O. G. *Training Career Public Servants for the City of New York*. New York: New York University, 1936.
40. STRONG, E. K. and UHRBROCK, R. S. *Job Analysis and the Curriculum*. Baltimore: Williams and Wilkins, 1923, 145 pp.
41. TEAD, ORDWAY. *Human Nature and Management*. New York: McGraw-Hill, 1933, 297 pp. Especially chapters 13 and 16.
42. TEAD, ORDWAY. *The Art of Leadership*. New York: McGraw-Hill, 1935.
43. TEAD, ORDWAY and METCALF, H. C. *Personnel Administration: Its Principles and Practice*. New York: McGraw-Hill, 1933, 504 pp. Chapters 11-13.
44. TENNESSEE VALLEY AUTHORITY, PERSONNEL DEPARTMENT. *The Problem and Procedure of Training Participation Reports*. Knoxville, June 1, 1939.
45. UNITED FEDERAL WORKERS OF AMERICA, EDUCATION COMMITTEE. *Proceedings of the Conference on In-Service Training in the Federal Government, January 14-15, 1939*, Washington, D.C., 106 pp.
46. UNITED STATES CIVIL SERVICE COMMISSION. *The United States Civil Service Commission's Part in Federal Training*. May 12, 1939.
47. UNITED STATES DEPARTMENT OF AGRICULTURE, FOREST SERVICE. *Report on a Training Program for United States Forest Service Officers, Plains Shelterbelt Project*. 1936.
48. UNITED STATES DEPARTMENT OF AGRICULTURE, OFFICE OF PERSONNEL. *Employee Training Policy*. April 1939, 40 pp.

49. UNIVERSITY OF THE STATE OF NEW YORK. *Bulletin*. Albany: May 16, 1938.
50. UNIVERSITY OF WISCONSIN. *The Wisconsin State Government In-Service Training Apprenticeship Program*. 1939.
51. VITELES, M. S. *The Science of Work*. New York: Norton, 1934, 442 pp. Chapter 8.
52. WALKER, H. *Training Public Employees in Great Britain*. New York: McGraw-Hill, 1935.
53. WALSER, F. *Art of Conference*. New York: Harper, 1933, 305 pp.
54. WHITE, L. D. *Government Career Service*. Chicago: University of Chicago, 1935, 99 pp.

Supplementary References: 1947

FOLLOWING is a brief supplementary list of material dealing with employee training that has appeared since the original publication of *Employee Training in the Public Service* in 1941. In the intervening period a very considerable amount of literature on the subject has been written, and this list makes no pretense at completeness of coverage. It should be useful, however, as a guide to the reader interested in reviewing some of the more recent relevant material in this field.

AMERICAN MANAGEMENT ASSOCIATION. *How to Prepare and Publish an Employee Manual*. 330 West 42nd Street, New York City 18, 1942. 35 pp. illus. 75¢.

—-. *Training for Management Skills*. 330 West 42nd Street, New York City 18, 1946. 32 pp. Personnel Series No. 104.

BROOKER, FLOYDE E. "Visual Aids in Training." *Modern Management*, October, 1946. pp. 23-25.

COOPER, ALFRED M. *Employee Training*. McGraw-Hill Book Company Inc., 1942. 311 pp.

DECKER, D. D. "A Practical Supervisory Training Program." *Personnel*, November, 1939. pp. 62-66.

FARRINGTON, ROBERT P. "A Work Methods Training Program for State Employees." *Public Personnel Review*, October, 1943. pp. 236-39.

FURIA, JOHN J. "Training as an Administrative Tool in New York City's Transit System." *Personnel Administration*, December, 1942. pp. 7-13.

HAUSRATH, ALFRED H., JR. "Guiding Principles of Training in the Federal Service." *Personnel Administration*, May, 1946. pp. 1-4.

HOGAN, RALPH M. AND DAVIS, WALLACE M. "Finding Training Materials for the Hard-to-Fill Job." *Personnel Administration*, March, 1943. pp. 3-9.

HUNTER, ROBERT L. "The Illinois State In-Service Training Program." *Public Personnel Review*, July, 1947. pp. 138-43.

INSTITUTE FOR TRAINING IN MUNICIPAL ADMINISTRATION. *The Conference Leader's Job in Management Training*. 1313 East 60th Street, Chicago 37, Illinois, 1946. 13 pp. 25¢.

- . *Conference Method Training in Management*. 1313 East 60th Street, Chicago 37, 1946. 12 pp. 25¢.
- . *Management Training; Your Responsibility*. 1313 East 60th Street, Chicago 37, 1946. 15 pp. 25¢.
- JOHN, WALTON C. "Schools under the Federal Government: The Department of the Navy." *School Life*, May, 1940. pp. 232-35.
- . "Schools under the Federal Government: The Department of Agriculture." *School Life*, July, 1940, pp. 298-300, 304.
- KIRKPATRICK, FRANCES. "What T.W.I. Has Learned about Developing Training Programs." *Personnel*, September, 1945. pp. 114-20.
- LEHMAN, W. P. "The Management Training Conference Plan." *Public Personnel Review*, April, 1942. pp. 138-44.
- MCGLOTHLIN, WILLIAM J. "Employee Training in TVA during Wartime Expansion." *Public Personnel Review*, October, 1943. pp. 244-53.
- MICHELMORE, LAURENCE. "University In-Service Training for Public Employees." *Public Management*, October, 1939. pp. 299-301.
- MINNESOTA DIVISION OF ADMINISTRATIVE MANAGEMENT AND RESEARCH. *Improving State Employee Effectiveness with an Orientation and Reference Manual*. State Capitol, St. Paul, August 31, 1943. 32 pp. mimeographed, bibliography.
- MITCHELL, JAMES M. "Current Trends in Public Employee Training." *Journal of Educational Sociology*, January, 1941. pp. 292-97.
- MOFFETT, GUY. "The Place of Training in Personnel Management." *Personnel Administration*, October, 1943. pp. 207.
- MORALES, M. F. "An Approach to Municipal Employee Training." *Public Personnel Review*, April, 1947. pp. 79-82.
- PERKINS, JOHN A. "The Conference Method of In-Service Training." *Public Management*, May, 1945. pp. 137-40.
- PETRIE, FRANK A. "The Training Film in Our War Effort." *Personnel Administration*, June, 1942. pp. 13-15.
- PRINCETON UNIVERSITY. *University Education and the Public Service*. Princeton, New Jersey, 1946. 31 pp. Series 2, Conf. 1.
- REINEMANN, J. O. "Pennsylvania Experiments with Public Service Training." *National Municipal Review*, October, 1940. pp. 672-74, 706.

- ROBERTS, SAMUEL M. AND McCABE, WILLIS R. "Training Municipal Employees on the Job." *Public Management*, February, 1943. pp. 40-43.
- ROMMEL, ROWENA BELLOWS. "The Making of Administrators." *Public Administration Review*, Spring, 1942. pp. 113-15.
- SOCIAL SCIENCE RESEARCH COUNCIL. Committee on Public Administration. *The Use of Training as an Administrative Tool by Top Management*. Public Administration Service, 1313 East 60th Street, Chicago 37, 1942. 7 pp. Case Reports in Public Administration: No. 76. 10¢.
- STANLEY, DAVID T. "G.I. Lessons in Training." *Personnel Administration*, December, 1944. pp. 26-29.
- STERN, LEON T. "A State In-Service Training Program." *Probation*, April, 1940. pp. 110-13.
- SWEET, LENNIG. "The Training Officer in the Federal Service." *Personnel Administration*, January, 1942. pp. 9-13.
- TENNESSEE VALLEY AUTHORITY PERSONNEL DEPARTMENT. Training Division. *Training Program for Assistants in the Personnel Department*. Revised Edition. Knoxville, June, 1941. 22 pp. mimeographed, tables. 20¢.
- U. S. CIVIL SERVICE COMMISSION. Division of Training. *Training Programs in the Federal Service*. Washington, D. C., July, 1942. 78 pp. illustrated, charts.
- U. S. FARM CREDIT ADMINISTRATION. *Recommendations for Proper Employment of the Individual Letter, Circular Letter, and Revisable Manual*, by W. S. Harris. Washington, D. C., August, 1942. 27 pp. mimeo.
- U. S. OFFICE OF EDUCATION. *Use of Training Aids in the Armed Services*. Government Printing Office, Washington 25, D. C., 1945. 33 pp. bibliography. Bulletin 1945, No. 9. 10¢.
- U. S. OFFICE OF GOVERNMENT REPORTS. *Intensive Method of Training Stenographers and Typists*, by B. P. Foote. Washington, D. C., February, 1942. 12 pp. tables.
- U. S. WAR MANPOWER COMMISSION. Bureau of Training. *The Training within Industry Report, 1940-45*. Washington, D. C., 1945. 330 pp. tables, charts, forms. 50¢.
- UNSIGNED. "Training Municipal Employees in Public Relations." *Public Management*, February, 1947. pp. 47-50.

